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# Entrepreneurship: a unit experimentally implemented in secondary vocational home economics programs

Cheryl Wilson Compton  
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COMPTON, CHERYL WILSON

ENTREPRENEURSHIP: A UNIT EXPERIMENTALLY IMPLEMENTED IN  
SECONDARY VOCATIONAL HOME ECONOMICS PROGRAMS

*Iowa State University*

Ph.D. 1981

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**Entrepreneurship: A unit experimentally implemented in  
secondary vocational home economics programs**

**by**

**Cheryl Wilson Compton**

**A Dissertation Submitted to the  
Graduate Faculty in Partial Fulfillment of the  
Requirements for the Degree of  
DOCTOR OF PHILOSOPHY**

**Major: Home Economics Education**

**Approved:**

Signature was redacted for privacy.

**In Charge of Major Work**

Signature was redacted for privacy.

**For the Major Department**

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**For the Graduate College**

**Members of the Committee:**

Signature was redacted for privacy.

**Iowa State University  
Ames, Iowa**

**1981**

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## INTRODUCTION

Going into business for yourself is part of the American dream on which the United States was founded. Small business ownership is still an important concept in the American economy as shown by its current prevalence. Ninety-eight percent of American businesses are considered "small" business firms, and these small businesses employ fifty percent of the American labor force (Baumbeck, Lawyer, & Kelley, 1973, p. 5; Broom & Longnecker, 1975, p. 3).

Despite the recognized importance of small business in the American economy, vocational educators have traditionally not included entrepreneurship as a topic in vocational programs (Leach, 1977). Vocational educators have recognized that entrepreneurship is an important career area for vocational programs (Nelson & Bober, 1977) and programs of entrepreneurial career awareness and work experiences are recommended for inclusion in vocational education programs (Russell, 1980).

Curriculum materials on entrepreneurship are limited and available materials do not deal with career exploration of entrepreneurship at the high school level in vocational home economics programs. The most noted materials are Programs for Acquiring Competence in Entrepreneurship (PACE) (The Center for Vocational Education, 1980) and Small Business Management Going-Into-Business Modules (Persons & Swanson, 1978). PACE

is a set of individualized instructional modules designed for use with adult or advanced high school students. The Small Business Management Going-Into-Business Modules are a series of 15 lessons designed for adults with ongoing businesses and for use by teachers who are familiar with business concepts.

The major purpose of this study was to evaluate the implementation of a unit exploring entrepreneurship as a career option in secondary vocational home economics programs. Because available materials reviewed were not appropriate for use in a career exploration program on entrepreneurship in home economics, it was necessary to develop the instructional unit. As background information for developing the unit, it was necessary to study home economics related small businesses and their owners to determine content areas and information about small businesses for inclusion in the entrepreneurial unit. Limited information on male and female entrepreneurs was available (Gilmore, 1972; The Bottomline, 1978). However, this information did not focus on the problems and concerns of business owners in home economics related small businesses. Objectives of the research on home economics related small businesses and their owners included answering the questions:

(1) What are primary problems and concerns of small business owners in home economics related small businesses?

(2) What are characteristics of home economics related small businesses?

Home economics related business: One whose products or services are related to foods, nutrition, textiles, clothing, home furnishings, child development, or family services.

Small business: One that is independently owned and not dominant in its field of operations.

Female-owned business: One in which a woman has major ownership and/or major responsibility for the operation of the business.

#### Explanation of Dissertation Format

The dissertation format used in the presentation of the research is approved by the Graduate Faculty at Iowa State University. This format presents the research in manuscript form. The manuscripts are suitable for publication in professional journals.

The dissertation begins with an introduction and review of the literature which provides background for the total research project. The body of the dissertation includes three sections which address three distinct components of the research. The first section is a manuscript describing data on small businesses in Iowa. This manuscript is written for a general research journal and provides a base for evaluating the implementation of the entrepreneurial unit in secondary vocational home economics classes, the second phase of the

research. The second manuscript describes the development and pilot test of the unit, Career Exploration of Entrepreneurial Home Economics Opportunities. This manuscript was written for a professional journal for vocational teachers in secondary schools. The third manuscript describes the field test of the unit including the appropriateness of entrepreneurial education in secondary vocational home economics programs. Both quantitative and qualitative results of the data analysis are included. This manuscript was written for a professional journal for vocational education researchers.

The authorship for Section I was held by the doctoral candidate. The authorship for Sections II and III was shared with Dr. Alyce M. Fanslow, major professor for the dissertation and director for the research project, "Entrepreneurial Opportunities For Home Economics In Rural Areas," of which this research was a part. The research project, "Entrepreneurial Opportunities For Home Economics In Rural Areas," was funded by the Agriculture and Home Economics Experiment Station at Iowa State University, project number 2318.

The final chapter summarizes the total research and presents overall findings. Conclusions and recommendations for future research are also included in the final chapter.

## REVIEW OF LITERATURE

Entrepreneurial education is a focus new to vocational home economics. Since this focus has not previously been explored in depth, research on entrepreneurial education needs to include information on the current role of small business in the American economy. An understanding of the importance of small business in the economy provides a base for analyzing the relationship of entrepreneurship and vocational education.

If entrepreneurship is viewed as important for vocational educators, entrepreneurial curriculum materials available to vocational educators need to be quantitatively and qualitatively evaluated for their potential usefulness. In order to evaluate these materials, background information on small businesses and their owners would be necessary. The background information would provide a base for determining if needed concepts were being presented in the curriculum materials.

Therefore this review of literature focuses on the following areas:

- (1) The role of small business in today's American economy.
- (2) The role of entrepreneurship in vocational education.
- (3) The background characteristics of small businesses and their owners.

(4) The evaluation of entrepreneurial curriculum materials.

#### Role of Small Business in the Economy

Small business has been defined by the United State's Small Business Administration (SBA) using quantitative measures including (1) number of employees and (2) dollar sales volume. These measures need to be changed frequently because of inflation. Further, these figures vary between manufacturing, retail, service, and wholesale businesses (Baumbeck et al., 1973, p. 5; Broom & Longnecker, 1975, p. 3). Baumbeck et al. (1973, p. 5) prefer a qualitative definition such as that of the Committee for Economic Development (CED). The four attributes of independent management, owner supplied capital, mainly local area of operations, and relatively small size within the industry, are used by CED to qualitatively define small business.

The Small Business Administration also developed a qualitative definition of small business. The definition is that a small business is one that is independently owned and operated and which is not dominant in its field of operation. In addition to the foregoing criteria, the SBA may use the criteria, number of employees and dollar sales volume of business (U.S. Congress, 1953, p. 233) as part of the definition.

In 1870, 80 percent of the American labor force were self-employed, while in 1980 only 20 percent were self-employed. Despite this shift in the percent of self-employed persons in the past century, entrepreneurial enterprises predominate in manufacturing, retailing, wholesaling, and service establishments (Broom & Longnecker, 1975, p. 7; Siropolis, 1977, p. 7). This predominance is shown by the percent of American businesses which are considered "small businesses."

Ninety-eight percent of American businesses have fewer than 50 employees and are considered "small" business firms. These small businesses employ 50 percent of the American labor force (Baumbeck et al., 1973, p. 4; Steinhoff, 1978, p. 6). Approximately 500,000 new small businesses are started each year (Siropolis, 1977, p. 9), yet only half will exist for 18 months or longer. Persons (1978) noted that there are 400,000 business closures each year.

Small business enterprises have been recognized for their unique contributions to the economy. These contributions include: (1) providing the middleman service necessary because of the interdependence of business, (2) preservation of competition and a system of free enterprise, and (3) providing the major source of new ideas and improvement for goods and services (Baumbeck et al., 1973, p. 11-15; Deeks, 1976, p. 63; Steinhoff, 1978, p. 11). In addition, small business stimulates economic growth of the nation by creating new jobs

(Bottoms, 1980).

A White House Conference on small business was held in 1980 as further indication of the importance in today's economy of small business enterprises. On July 2, 1980, President Carter signed Public Law 96-302, the Small Business Development Act of 1980 (U.S. Congress, 1980, pp. 833-854). This act addresses the importance of preserving and promoting a free enterprise economic system through loan programs, procurement systems, and program authorizations. The act acknowledges the responsibility of the federal government to foster the economic interests of small businesses and ensure a competitive economic climate conducive to the development, growth, and expansion of small business. The act further states that the federal government is committed to "use all reasonable means to coordinate, create, and sustain policies and programs which promote investment in small business, including those investments which expand employment opportunities" (U.S. Congress, 1980, p. 848).

Given the recognized importance of small business to the American economy, educators need to evaluate their role in preparing individuals for this career. Siropolis (1977, p. 10) discusses screening potential entrepreneurs. However, Siropolis emphasizes that potential small business owners must have their right to make a choice, and it is through education about small business ownership that a knowledgeable



choice can be made.

### Role of Entrepreneurial Education in Vocational Education

Vocational education has been defined as preparation for work or preparation for an occupation. This preparation can include career awareness and exploration, as well as in-depth preparation for specialized training and career advancement (Wenrich & Wenrich, 1974, p. 19). Traditionally vocational education has not included entrepreneurial preparation, except in vocational agriculture (Leach, 1977). With three or four potential entrepreneurs in every American classroom (Nelson, 1977), entrepreneurship is recognized as an important career area for vocational programs.

Leach (1977) stated that in view of the importance of small business ownership in the economy, the subject of small business ownership and management may be introduced to secondary students to create an awareness of this career opportunity. These concepts may also be taught in depth as preparation for a career at the postsecondary level.

The National Advisory Council on Vocational Education (NACVE) issued a report in 1979 stating, "Education has neglected a responsibility to help prepare people for entrepreneurial employment" (p. 3). This report emphasized that society has developed a new appreciation for the entrepre-

neurial role and recognizes the importance of entrepreneurship to the economy. Recommendations from NACVE are:

We should immediately re-examine public policy to find out how government at all levels may be discouraging the formation of small business and then propose reforms.

We should enlarge our conception of manpower policy to include and emphasize suitable incentives for self-employment.

We need to encourage business to accelerate its search for ways to re-define employment in more entrepreneurial terms.

We need to know how educational programs can be modified to prepare people for entrepreneurially-defined work. We know surprisingly little about where entrepreneurs come from, what they are like and how education might better nourish and instruct the entrepreneurial impulse (p. 4).

In closing, the report states, "the Council believes that the job creation potential of vocational education has not been realized and acknowledged. It is a new dimension in vocational education which must be discussed, explored, and developed" (p. 5).

The American Vocational Association has recently recognized the importance of entrepreneurship in vocational education. Entrepreneurship was a theme for the 1980 American Vocational Association convention. Presentations on entrepreneurship included discussions on the American Vocational Association's (AVA) responsibility to encourage the inclusion of entrepreneurship in vocational education programs and a report of current pilot programs (Russell, Note 1). Methods to integrate entrepreneurship into on-going vocational programs were presented (Fanslow & Compton, Note 2). A current

project to create entrepreneurship modules for use in vocational programs at the secondary level was also presented (Kaplan, Note 3).

Phillips (1980) noted that AVA and vocational education must keep entrepreneurship in the forefront of their thinking. Russell (1980) reported that the National Education and Training Task Force for Minority Business Enterprise concluded that entrepreneurship is currently ignored by the educational community and career awareness programs and work experience programs are recommended actions.

#### Entrepreneurship in vocational home economics education

Vocational home economics is a part of vocational education as specified in the Education Amendments of 1976, PL 94-482 (U.S. Congress, 1976, p. 2196). Since entrepreneurial preparation is considered an appropriate focus for vocational education, it is important to review the current status of entrepreneurial education in vocational home economics.

Currently there are no programs in entrepreneurship in secondary consumer and homemaking programs. Entrepreneurship is included as a topic in occupational home economics programs in secondary New York City schools (Greenwald & Perry, Note 4), yet students do not achieve full experience as a small business owner in these programs. At the Dallas Skyline Center in Dallas, Texas, entrepreneurship is included as a career

option through vocational skill development. In this high school program, students are briefly exposed to entrepreneurial concepts, though the program emphasis is on vocational skill development (Kennedy, Note 5).

A program on entrepreneurship in the apparel industry is included at Oklahoma State University (Greenwood, Note 6). This program is for college students and focuses specifically on the apparel industry and textile related businesses.

Given the few programs identified, it is apparent that entrepreneurship has not been included in traditional vocational home economics programs. Because entrepreneurship has been recognized as an important focus for vocational education, it would be an important focus for vocational home economics educators to consider.

If entrepreneurial programs are to be developed in vocational home economics, then characteristics of home economics related small businesses and their owners would be a necessary base for program development. This information would also be needed as background information to evaluate curriculum materials available in other vocational education areas.

#### Characteristics of Small Businesses and Their Owners

A great deal of research has been conducted on male entrepreneurs to analyze entrepreneurial personality types and

psychological traits. Need for achievement has been studied extensively and is recognized as the primary motivation for entrepreneurial success (McClelland, 1961, pp. 36-62; Schrage, 1965; Wainer & Rubin, 1969). A study was done to develop an objective test to measure personal characteristics of successful entrepreneurs (Hornaday & Aboud, 1971). The characteristics studied were need for achievement, need for autonomy, need for aggression, and the importance attached to recognition, independence, and leadership. Also investigated were hours worked, family relationships, and family background. An objective test was developed, but it was not determined whether this test differentiated between successful and unsuccessful entrepreneurs.

Collins and Moore (1964, 1970) conducted an exploratory study on the process of organization making carried out by independent entrepreneurs, and Shapero (Note 7) studied the company formation of independent business owners. None of these studies actually summarized characteristics of the businesses owned by the entrepreneurs, nor summarized demographic characteristics of the entrepreneurs.

Gilmore (1972) studied 47 manufacturing firms in Oklahoma to evaluate psychological motivations and describe personal characteristics of entrepreneurs. Gilmore did identify the following characteristics to be associated with these entrepreneurs:

- all were male and all were married,
- a disproportionate number had foreign-born parent(s),
- they were more highly educated than the average white male Oklahoma population,
- many had self-employed fathers,
- a high school graduation was the threshold level of education.

The studies discussed involved almost exclusively male entrepreneurs. Hornaday and Aboud (1971) had four females (less than 8%) and Collins and Moore (1964, 1970) had two females (less than 2%) in their samples. These studies were restricted to primarily manufacturing and research and development business firms. A representative description of the current status of small business firms is not available from these studies.

Recently exploratory research concerning the status of women-owned businesses has been conducted. This research is limited, but does give some indications on female business ownership.

In 1976, the Bureau of the Census published the survey of Women-Owned Businesses, 1972. Women-owned businesses represented 4.6 percent of all large and small business firms and receipts totaled \$8.1 billion, 0.3 percent of all business receipts. Most firms, 98 percent, were sole proprietorships, and the firms were concentrated in selected services and

retail trades. Seventy-three percent of women-owned firms had less than five employees and the firms with receipts of \$1 million or more represented less than 0.1 percent of women-owned firms. No demographic information on the entrepreneurs was contained in this study.

The Bottomline: Unequal Enterprise in America (1978) is a report of the President's Interagency Task Force on Women Business Owners. The Task Force information was summarized from 2,973 women respondents. The information showed that typically the woman business owner is in her mid-forties. In 1975 she earned about one-third the amount of self-employed men and ran primarily white-collar businesses in retail or service areas. The growth rate for self-employed women was three times greater than that for self-employed men from 1972 to 1977. Most of the women had been in the work force for several years prior to starting their own business, and they had created their businesses alone. Most of the women (58.2 percent) were married, and 18.7 percent were divorced. Thirty-one percent obtained start-up capital from a commercial bank and 11.2 percent from a government program, while most respondents obtained start-up capital from personal savings. Sixty-five percent had applied for bank credit with the majority of applicants receiving some credit. More than half of the applicants sought \$10,000 or less in their bank credit application.

The respondents indicated that 22.4 percent had finished only high school, and 46.1 percent had one to four years of college. Nineteen percent were racial or ethnic minorities.

The American Management Association (AMA) conducted a survey in association with the Task Force (The Bottomline, 1978). A mailed survey to 900 participants, with follow-up in-depth interviews with 40 respondents, was conducted. The AMA developed a model of the woman business owner to summarize their research. That model included the following characteristics. The woman business owner:

- came from a close, supportive family,
- had a strong bond to the male parent role,
- showed a strong entrepreneurial "drive" early in life,
- tended to be more highly educated than the average person,
- exhibited a capacity for hard work and dedication to her business,
- had a good understanding of her business field,
- was persistent in her work,
- communicated and worked well with both males and females,
- had the ability to integrate and coordinate the many aspects of her life including business and family.

A study by Flexman (1980) was conducted to analyze (1) success and failure incidents of self-employed women, and (2) the association of the psychological constructs of agency



or communion and attributions with success and failure incidents. The sample size of 61 was limited because personal interviews were conducted to obtain the data. Results indicated that successful women had "struck an acceptable balance between being goal oriented and being people oriented in their successes" (p. 102). Four pairs of attributions were found to have significant correlations on both success and failure incidents. The attributions were (1) ability and information or experience, (2) ability and confidence, (3) luck and other's help, and (4) luck and accident. This study, while giving an indication of psychological constructs associated with business success for women, also gave some characteristics on the backgrounds of the women studied. A composite showed that a woman:

- was married,
- was 30 to 40 years of age,
- had two or fewer children,
- had a supportive husband,
- had some college education,
- had held three or fewer paid full-time jobs prior to self-employment,
- had one or both self-employed parents,
- had started her business in her late twenties or thirties,
- had owned her business for less than six years,

- had a retail, business service, or professional service establishment,
- planned to maintain or expand her business,
- contributed to family income from business income.

Schwartz (1976) conducted a study to develop a better understanding of female entrepreneurs; the kind of women, as compared to the kind of men, who became entrepreneurs. An additional objective was to determine what women go through to build and maintain a new business.

Twenty females from primarily service businesses were interviewed. Selection procedures for obtaining respondents were not reported in the study.

Results of the Schwartz study are summarized in the following six points.

(1) Motivators for becoming entrepreneurs were need to achieve, desire for independence, need for job satisfaction, and economic necessity.

(2) The most important personality traits for entrepreneurial success were thought to be a strong ego and achievement drives.

(3) The women entrepreneurs leaned toward an autocratic management style.

(4) The major barrier experienced was credit discrimination and many felt discrimination occurred because they were women.

(5) The greatest common mistake made was underestimating the cost of operating their business.

(6) Female entrepreneurs believed their entrepreneurial abilities, just as those in men, could be developed if they understood qualities important for successful entrepreneurship.

Schwartz concluded that entrepreneurship is a new frontier for women, offering unlimited opportunities. She believed that successful female entrepreneurs will attract other women to the entrepreneurial role.

The most thorough investigation of personal characteristics of female entrepreneurs to date is the 1978 Demarest study conducted in Boulder, Colorado. This study was done as an in-depth exploratory investigation to describe female entrepreneurs and present theoretical questions for a body of future studies on female entrepreneurs. This study is important because it describes female entrepreneurs as a group. Demarest believed that female entrepreneurs could not be compared with male entrepreneurs or with popular myths about entrepreneurship until they had first been studied as a group in themselves.

Demarest interviewed 51 women involved in 53 enterprises. The interviews covered background characteristics of the women, business characteristics, the operation of the business, motivations for being in business and attitudes towards success,

the effects of the enterprise on their personal lives, and their business philosophy.

Demarest's sample population was confined to women in Boulder, Colorado, who were self-employed in the market sector or who owned at least 50 percent of a business and who acted as a key person in the company.

Business characteristics results were compared with results from the 1972 Office of Minority Business Enterprise study of the data from the Boulder areas. Results showed that only five women had any formal business education before starting their own businesses. Only two enterprises used formal resources, such as Small Business Administration programs, for advice. Several received instructions in their field, but this did not include instruction about the daily operation of a business. Many did report that this lack of business knowledge was the source of their major difficulties during the first year of operation.

Conclusions from the Demarest study included the following:

- The majority of women were raised in families in which one or both parents had small businesses at some time during their childhood.

- Women followed two basic routes into business. Their radical departure from life course was experienced as an "identity crisis" or they saw starting a business as a

natural step in their life-pattern.

-Most of the women started their businesses with less than \$5,000.

-Most women espouse profeminist views toward women's roles in society and most reported experiences of perceived sex discrimination at some time in their lives, but felt it had little effect in keeping them from achieving their goals.

-Most of the women reported being happy with their personal lives, and most reported their families were supportive of their businesses.

-A strong sense of independence and freedom involving a basic sense of personal control over their lives was a dominant theme.

-Reports of the personal incomes and sources of financial support indicated that self-employment was not an assured route to economic independence.

-The women appeared for the most part to be well-balanced people who were satisfied with their lives.

Demarest included extensive recommendations for future research. Demarest recommended conducting similar surveys on a national scale. Also, more reliable and complete survey methods need to be used including women from both metropolitan areas and small towns. Information is also needed on how women operate their businesses; deal with money; handle child care and housework; and deal with spouses, employees, com-

petitors, and other important people in their lives. Demarest recommended comparing this group of women with male counterparts and women in other management positions in companies they do not own.

Using the information presented on female- and male-owned small businesses, curriculum materials could be reviewed. The review would assess the degree to which needed topics are included in the materials for potential entrepreneurs. Topics which would need to be included are: financing, business record keeping, managing employees and merchandise, and selecting a business.

#### Entrepreneurial Curriculum Materials

Curriculum materials on entrepreneurship are limited and materials reviewed do not deal with career exploration of entrepreneurship at the high school level in vocational home economics programs. Available materials are discussed and reviewed according to their content and level for students.

A series of publications titled the American Enterprise Series (Brown, 1975; Eberhardt, 1975; Koeninger, 1975; Lucas & Miles, 1976; Luter, 1975; Strydesky, 1975) has been published by the University of Texas at Austin. This advanced distributive education curriculum was designed to promote the concepts of free enterprise and entrepreneurship. The series is designed for twelfth grade high school students in coopera-

tive programs or post secondary students in middle management and advanced marketing curricula. The series includes six subjects, selling, marketing, promotion, management, merchandising and buying, and financial management. The six subjects are covered in great depth. A student manual, instructor's guide, and audiovisual materials are provided as part of the complete set of materials. This author only reviewed the student manuals, but did assess that the subjects are studied in depth and materials were designed for a semester or year-long course.

The National Business Education Association (1972) conducted a project to develop a business ownership and management curriculum to be used at the prevocational and exploratory grade levels (7-9). Behavioral objectives, a pretest, four filmstrips, a business simulation game, a posttest, and teacher's guide and lesson plans comprise the unit. The unit is titled Business Ownership and Management Core Curriculum. Topics covered include business ownership, marketing, personnel management, and financial management. The unit is designed to be used in 11 classroom hours.

The unit was pilot tested in Miami, Florida, and in rural South Texas. The unit was revised based on teacher recommendations. The difficulty with this unit is its current lack of availability. It has never been published and is available only through ERIC. Also, the filmstrips are unavailable for

review. The final report states that the "filmstrips were received well by all groups, and students considered that learning had taken place" (p. 22), but fails to support this with statistical data.

Minding Your Own Small Business (Athena Corporation, 1976) is a one semester high school course in small business ownership. It is intended for use in both general and vocational education classes. The focus of the course is on general management skills. There are 35 modules divided into four units. The four units are titled, "The Sixteen Hour Day," "The Market is People," "Dollars and Decisions," and "Managing for Success." Two small business simulation games are also an integral part of the curriculum. The length of this curriculum, as well as the difficulty of the simulation, makes implementation of this unit into high school vocational education programs difficult. Also, there is no information available concerning the results of using this unit in high school classes.

Persons and Swanson (1978) developed a small business management program to help families improve the effectiveness of their business operation and enable them to reach business goals. The curriculum, Small Business Management Going-Into-Business Modules, is a series of 15, two-hour lessons to be used in an on-going adult vocational program or a short-term adult course. The program was pilot tested in six Minnesota



locations before revisions and final development. The modules are well designed with objectives, teaching strategies, and key questions. Because the program is developed for adults with on-going businesses and for teachers who are familiar with business concepts, it is inappropriate for career exploration in high school home economics classes. Topics included in the modules are, decision making, financing, business location, record systems, balance sheet, purchasing, marketing, sales, cash flow, taxes, insurance, management controls, employer-employee relations, break-even analysis, and maximizing profit.

Owning and Operating A Small Business: Strategies for Teaching Small Business Owners Ownership and Management

(Nelson, 1976) is a curriculum guide designed to aid a teacher of students at the secondary and adult levels. Each unit has objectives and suggested activities, but the background information for teachers is limited. Topics included in the unit include (1) the nature of small business, (2) determining product and market, (3) selecting the location, (4) obtaining initial capital, (5) choosing the legal form of organization, (6) managerial planning, (7) record keeping, (8) financial management, (8) credit and collections, (10) advertising and sales promotion, (11) employee and community relations, (12) obtaining information and assistance, (13) insurance, and (14) the future of small business. Most units

include a case study for student analysis. The supplemental information for both students and teachers is limited and this unit would be difficult for teachers new to the topic of entrepreneurship to implement.

The Center for Vocational Education conducted a project to develop instructional units on entrepreneurship. Programs for Acquiring Competence in Entrepreneurship (PACE) (1980) are the resulting units. PACE is divided into three parts, (1) getting ready to become an entrepreneur, (2) becoming an entrepreneur, and (3) being an entrepreneur. Each of the units are written for three levels of learning, (1) exposure, (2) exploration, and (3) preparation/adaption. The units are individualized modules written with objectives, reading material, and self-evaluation. Students select their level of learning and proceed through that section of the unit module. The 19 units cover the topics nature of small business, entrepreneurial characteristics, business success and failure, the business plan, business location, legal issues, government regulations, types of business ownership, financing, managerial resources, managing the business, financial management, business records, marketing, selling, human resources, community relations, business protection, and implications of technology on business.

Because of the individualized approach and emphasis on reading assignments, the units would require revision prior to

implementation in an on-going vocational home economics program. The modules are developed for students in postsecondary classes, adult programs, or advanced high school students. Thus, this set of units is not written at the level appropriate for secondary vocational home economics students.

Entrepreneurial curriculum materials are currently being developed in two research projects. Scanlan and Sredl are project codirectors for the "Methods and Materials for Entrepreneurship Education, Phase IV." This two and a half year project has resulted in the development of a three-volume resource, Entrepreneurship Education (Scanlan, Note 8). The materials are designed to aid instructors and counselors of students considering starting businesses or making other career changes. They are directed towards adult students. The volumes are (1) Learning the Skills, (2) Applying the Skills, and (3) Supplementary Readings. The skills addressed include inner control, decision making, planning and goal setting, risk taking, innovation, human relations, reality perception, and using feedback. The first volume is to be used in 19, 50-minute classroom sessions. Teaching materials include detailed lesson plans, visual aids, and out-of-class assignments.

Informal reactions from teachers indicate that the materials do focus on personal skills necessary to entrepreneurs. The students were highly motivated, and using the materials

was enjoyable for the teachers. The importance of setting goals for students was identified by one teacher as a good aspect of this program. The program will be available for distribution through workshops in 1981.

The U.S. Department of Education's Office of Vocational and Adult Education contracted with American Institutes for Research in 1979 to create entrepreneurship modules for use in vocational programs at the secondary level. The purpose was to help students understand how they could use their vocational skills for self-employment.

Thirty-six modules have been developed and will be field tested in 1981. It is anticipated they will be available for distribution in six regional workshops during summer of 1981 (Kaplan, Note 3).

The core module, "Getting Down to Business: What's It All About?", is designed to present basic business skills and to take 16 hours of classroom time. The other 35 modules are specific for businesses related to the seven major vocational education disciplines. The occupational home economics module titles are "Restaurant Business," "Day Care Center," "House-cleaning Service," "Sewing Service," "Home Attendant Service." The modules "Apparel Store," and "Special Food Store" are found in the module set designed for classes in marketing and distribution. Because of the specific businesses addressed in the modules, limited business exploration is possible.

### Summary

Entrepreneurship is recognized as an important topic for vocational education programs. Vocational home economics educators have been shown to be involved in entrepreneurial education on a limited scale. Because of the importance of entrepreneurship in the economy and in vocational education, it is appropriate to explore entrepreneurship in vocational home economics classes. Since materials do not currently exist for this career exploration, appropriate materials do need to be developed.

Home economics classes are composed of 81 percent female students in Iowa (Hughes, Rougvie, and Woods, 1980). Because female entrepreneurs in other areas of the United States were shown to have unique problems and characteristics, female entrepreneurs in rural Iowa need to be studied to assess their problems and characteristics. Also, male entrepreneurs in home economics related businesses need to be included in that assessment to determine if their problems and characteristics are the same as or different from those of female entrepreneurs in home economics related small businesses.

Thus, this research study will focus on (1) assessing the characteristics of home economics related small businesses in Iowa, including problems of their small business owners, and (2) evaluating the implementation of a career exploration

unit on entrepreneurship in secondary vocational home economics classes. The unit will be pilot tested, revised, and then field tested before final analysis is completed.

SECTION I.

FEMALE AND MALE ENTREPRENEURS: A COMPARISON OF  
THEIR BUSINESSES AND BACKGROUND CHARACTERISTICS

FEMALE AND MALE ENTREPRENEURS: A COMPARISON OF  
THEIR BUSINESSES AND BACKGROUND CHARACTERISTICS<sup>1</sup>

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2318.



## ABSTRACT

In 1979, a study was conducted to determine the status of female business owners in rural areas, and to compare the women-owned businesses with similar businesses owned by men. Respondents were deliberately selected from Chamber of Commerce lists of small-business owners. The invited sample included 175 women and 144 men business owners. Fifty-six percent of the invited sample responded to the mailed questionnaire.

The data were analyzed by chi square tests. Significant differences between female and male small-business owners were found. Female small-business owners earned less money, started with less business capital, and had lower gross receipts than male small-business owners. Men had more years of managerial experience than women prior to business ownership, yet women were older than men when they started their first business. Both men and women identified major business problems as, "reducing fixed costs," "following government regulations," and "selecting employees." Men, however, reported these problems more often than women.

## INTRODUCTION

An emerging national goal is to encourage women to pursue careers as entrepreneurs. The Small Business Administration created the National Women's Business Ownership Campaign in 1977. The purposes of the campaign were to provide management assistance and to encourage the involvement of women in small business (U.S. Small Business Administration, 1978, p. 3).

Former President Carter also recognized that women had limited involvement in small-business ownership. Little information existed as to the causes for the small number of women-owned businesses or the obstacles women face as entrepreneurs. The existing data on women business owners were limited because data had not been collected. Therefore, in 1977 President Carter established the Task Force on Women Business Owners. The purposes of the Task Force were to (1) identify existing data on women business owners and (2) study practices that discourage women from becoming entrepreneurs (The Bottomline, 1978, p. 3).

The Task Force study indicated that women business owners were motivated by some of the same factors that motivate men--the desire for independence and the ability to utilize a skill or talent. Women did, however, face obstacles of limited financing, little management training, and limited access to technical assistance. These specific problems were

similar to problems facing men entrepreneurs; however, the problems were magnified for women because of sex stereotyping.

## OBJECTIVES

The objectives of this study were to:

1. Determine the status of women business owners in selected retail and service businesses in rural areas and
2. Compare the women-owned businesses with similar businesses owned by men.

Data from this study would supplement information identified by the Task Force. The data would also give information specifically concerning women business owners in rural areas. This information is important for professionals who work with women considering entrepreneurship as a career, or women who need assistance in the management of an on-going business.

## PROCEDURE

Small-business owners completed a questionnaire in Spring, 1979, which requested information concerning (1) business characteristics, (2) background data, and (3) concerns of small-business owners. The questionnaire was developed from a review of small business references and interviews with small-business owners.

Experts in the areas of economics and small business ownership assessed the content validity of the instrument. Small-business owners in Iowa pilot tested the questionnaire prior to final revisions and implementation of the study.

The small-business owner respondents were deliberately selected from Chamber of Commerce lists of small-business owners in rural communities in Iowa. Rural communities were defined as having populations between 2500 and 20,000.

The businesses selected for this study were in five retail and service areas: foods, textiles and clothing, home furnishings, child care, and personal services. Women-owned businesses have been identified as concentrated in these retail and service business areas (The Bottomline, 1978, p. 30). Because a purpose of the study was to compare female and male small-business owners, it was considered important to identify areas in which both women and men participated in business ownership.

The invited sample included 175 female and 144 male business owners. The businesses included restaurants, catering services, grocery and speciality food stores, fabric stores, men's and women's clothing stores, interior design shops, paint, furniture, craft, and upholstery stores, and child care services. The researcher's intent was to invite equal numbers of female and male business owners in each specific type of business as respondents. This was not possible because no male owners of child care businesses, no female-owned men's clothing stores, and few female-owned furniture stores were identified. Also, many women and few men were identified as craft store and fabric store owners, while more men than women owned restaurants and grocery stores.

The data-producing sample included 56 percent of the invited sample. Ninety-five women and 84 men constituted the data-producing sample. Two way contingency tables were developed using male-female business owners as one variable and item responses as the second variable. Chi square values were computed on the tables to test significant differences between male and female owners. Because of the unequal N in cells, frequency counts were converted to percentages to facilitate comparison.

## RESULTS

The questionnaire data provided by the respondents were used to compare female-owned and male-owned small businesses. The male and female business-owner respondents also were compared on selected background characteristics. Table 1 shows the percentages of female and male responses to questionnaire items related to business characteristics. Table 2 shows the percentages of female and male responses to questionnaire items related to background characteristics. Each table shows the chi square values associated with the responses.

Following is a discussion of items producing significant results.

1. Gross receipts of business: Only 19 percent of the women compared with 63 percent of the men, had gross receipts in 1978 totaling \$125,000 or more. The Task Force survey found the majority (more than 66 percent) of women in their sample grossing over \$250,000 in 1977. The women surveyed in rural Iowa had much lower gross receipts than the women surveyed by the Task Force. The Iowa female business owners surveyed were concentrated in service businesses which typically have low gross receipts and could explain this difference.

2. Owner's draw: Women showed a much greater propor-

Table 1. Business characteristics of female and male entrepreneurs

Business characteristics	female %	male %	$\chi^2$
Gross receipts of business			48.8***
\$ 9,999 or less	31 <sup>a</sup>	3	
\$ 10,000 - \$ 24,999	14	3	
\$ 25,000 - \$ 49,999	14	6	
\$ 50,000 - \$ 74,999	10	7	
\$ 75,000 - \$ 99,999	6	9	
\$100,000 - \$124,999	6	9	
\$125,000 or more	19	63	
Owner's draw <sup>b</sup>			30.00***
\$ 4,999 or less	53	9	
\$ 5,000 - \$ 9,999	15	20	
\$10,000 - \$14,999	11	33	
\$15,000 - \$19,999	8	17	
\$20,000 or more	13	21	
Amount of initial business capital			31.9***
\$ 9,999 or less	46	13	
\$ 10,000 - \$24,999	32	24	
\$ 25,000 - \$49,999	7	23	
\$ 50,000 - \$99,999	4	20	
\$100,000 or more	11	20	
Reason for profitable business			
good management	56	78	8.1**
preparation and planning	53	72	5.6*
dedicated employees	42	63	6.8**
excellent product	63	80	5.6*

<sup>a</sup>Data are presented as percentages to facilitate comparison of unequal N in the groups of females and males.

<sup>b</sup>Data were analyzed using only small-business owners working 40 hours or more per week in their businesses.

\*  $p \leq .05$ .

\*\*  $p \leq .01$ .

\*\*\*  $p \leq .001$ .



Table 2. Background characteristics of female and male entrepreneurs

Background characteristics	female %	male %	$\chi^2$
Contribution to family income			73.8***
sole source	16	51	
major source (greater than 60%)	2	31	
coequal source (40%-60%)	13	7	
contributing source (10%-40%)	25	6	
minor source (less than 10%)	44	5	
Years worked in a managerial capacity preceding business ownership			17.3***
0	64	32	
2-4 years	18	35	
5 years or more	18	33	
Age when started the business			20.5***
25 or under	4	27	
26-29	16	20	
30-34	26	14	
35-39	20	16	
40 or over	34	23	
Primary reason for becoming a business owner			8.2*
profit	24	28	
job satisfaction	41	21	
continuation of family business	5	13	
reward for personal efforts	30	38	

\*  $p \leq .05$ .

\*\*\*  $p \leq .001$ .

tion of salaries less than \$10,000 (68%) than did men (29%). Women were concentrated in child care services and craft stores, which could account for this low salary level. These data were analyzed using only those business owners who were working 40 hours per week or more in their businesses.

3. Amount of initial business capital: Women obtained less initial business capital than did men. Seventy-eight percent of the females had less than \$25,000 of initial capital while only 37 percent of the men started their businesses with that amount. Questions to be considered by professionals working with female business owners are: (1) Is that the amount of money requested by women or (2) are women being given less money for capital loans?

4. Reasons for profitable business: Men reported "good management" and "preparation and planning" significantly more often than did women as reasons why their businesses were profitable. Conjectures as to why this was reported suggest that men were able to better analyze their business operations. Also, greater management experience and business preparation is reflected by these responses.

5. Contribution to family income provided by the business: Sixty-nine percent of the female business owners contributed 40 percent or less, of the family income whereas 51 percent of the male business owners provided the sole source of family income. The low contribution of family

income by women, reflected the low salaries found in the female business-ownership areas.

6. Years worked in a managerial capacity preceding business ownership: Male's greater experience in management was reflected in this item. Sixty-eight percent of the males had two or more years of managerial experience; only 36 percent of the females had that amount of managerial experience. Since lack of management experience is cited as a primary cause of business failure, it is important to encourage women entrepreneurs to seek management training.

7. Age when business was started: The women were significantly older when starting their businesses than were the men. Only 20 percent of the females started their businesses before age 29, but 47 percent of the males started their business before that age. The largest percentage of women (34%) started their business after the age of 40. Because many women become entrepreneurs after age 40, educational programs designed specifically for women starting a new career in mid-life, may be necessary.

8. Primary reason for becoming a business owner: Women most often indicated "job satisfaction" as their primary reason and men most often indicated "reward for personal efforts." More men indicated "profit" and "continuation of a family business" than women as their primary motivation. It is interesting to note that these reasons

were significantly different for women and men. This finding differs from the Task Force study in which reasons given by women and men for becoming small-business owners did not differ greatly.

9. Business problems: An inspection of Table 3 shows what problems were considered to be major problems of business

Table 3. Major business problems

Type of problem	female %	male %	$\chi^2$
Following government regulations	24	51	18.7***
Selecting employees	24	47	14.7**
Identifying target market	21	31	12.1**
Training employees	24	44	11.3**
Providing "back-up" personnel for owner	27	50	11.0**
Reducing fixed costs	45	63	10.0*
Advertising products	16	33	10.0*
Establishing credit policies	22	27	9.5*
Handling defective merchandise	24	38	8.8*
Determining products	22	31	7.6*
Supervising employees	17	29	7.6*

\*  $p \leq .05$ .

\*\*  $p \leq .01$ .

\*\*\*  $p \leq .001$ .

owners and were significantly different for males and females.

The percentage analysis for females is given in column 1, males in column 2, and chi square values in column 3. "Following government regulations," was the problems on which women differed most significantly from men. Women reported government regulations as less of a problem than did men. "Reducing fixed costs" received the highest percentage response of both men and women, with men again reporting it as a greater problem than women.

Overall, lower percentages of females than of males indicated items that were business problems. Data were not available to determine if the females actually did have fewer problems or if they only perceived that they did not have problems. The general categories in which most of the specific problem items grouped were financing problems, personnel problems, and marketing problems.

#### Personal Comments from Business Owners

The questionnaire included an open-ended item to qualitatively assess additional information on the business owners' opinions about their career choice and of advice that they would like to give to prospective entrepreneurs. Entrepreneurs enthusiastically completed this item and also enclosed unsolicited personal notes with the returned questionnaires. Their comments were overwhelmingly positive about choosing

small-business ownership as their career. Selected comments are included to give a concrete, yet qualitative, impression of the owners' feelings about their careers.

One owner indicated that small-business ownership has "the rewards of a job well done, the pride of ownership, and the satisfaction of being your own boss." Other comments: "Establishing credit was my biggest problem; good credit is a must" and "make sure you have enough capital." Another owner noted that it is "important to understand business and finances as well as your product or service; if you're prepared to work, it can be a most enjoyable experience." Another comment was that there are "always new goals to reach for." A final example: "You must never think of yourself as a loser; you are the competition for everyone else. Give 100% of yourself." These comments in general qualitatively gave the impression that women are enthused about their career, yet want and need specific guidance in owning a small business.

## SUMMARY

The purpose of this study was to compare a sample of female and male small-business owners and their businesses. The results provided information about female entrepreneurs in rural areas as compared with male entrepreneurs.

Female entrepreneurs typically earned less money than did male entrepreneurs. They started with less business capital and had lower gross receipts. Men had more years of managerial experience than women prior to business ownership, yet women were older when they started their business.

These results support the Task Force study showing that women do face obstacles of limited financing and little management training. Also supported is the concept that small-business owners are self-motivated and have a sense of independence.

Professionals who work with entrepreneurs can use these results to identify specific areas where women need assistance. They can also evaluate their programs to determine the effectiveness of meeting the special needs of female small-business owners.

SECTION II.

ENTREPRENEURSHIP: THE CAREER FOR YOUR STUDENTS?



ENTREPRENEURSHIP: THE CAREER FOR YOUR STUDENTS?<sup>1</sup>

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## INTRODUCTION

Entrepreneurship: A concept that plays a vital role in our nation's economy and a dream of the founders of our country. Is it a dream of which vocational educators have lost sight? Or can we instill the dream of entrepreneurship in vocational education students? Is entrepreneurship the career of the future for our students?

## Small Business

Small business ownership is not a lost concept in today's business world. Ninety-five percent of the firms in the United States are considered "small," and they employ 50 percent of the total work force. Available statistics show that women own less than five percent of U.S. business firms and that these women-owned businesses generate only about two percent of total gross business receipts.

The small number of women-owned businesses has focused national attention on women business owners. In 1977, the Small Business Administration (SBA) created the National Women's Business Ownership Campaign, and in 1978, the President established the Task Force on Women Business Owners. Both the SBA and the Task Force addressed the importance of entrepreneurial education for women. In support of this

national interest, vocational educators need to develop curricula to encourage women, as well as men, to consider this career.

## ENTREPRENEURIAL MATERIALS

Available entrepreneurial curriculum materials were reviewed and found to emphasize in-depth entrepreneur preparation. No curriculum materials were found appropriate for secondary, female and male students, to explore entrepreneurship as a career option. Thus, a three-week unit for vocational home economics classes, "Career Exploration of Entrepreneurial Home Economics Opportunities," was developed.

Overall unit objectives for students are:

1. explore small-business ownership as a career option.
2. identify factors influencing the success of a small business.

Lessons were developed in the following content areas:

Nature of small business

Goal setting

Product determination

Advertising

Business location

Business expenses

Business capital

Types of business organization

Financial management

Business record keeping

### Customer and employee relations

#### Characteristics of small-business owners .

The unit starts with an overview of the small business and the importance of goal setting. The relationship between short- and long-term goals are reviewed. Small groups of students (2-3) are formed, and each group works as a team throughout the unit. The team proposes a business. They identify the target market, select advertising media, and determine a location in their community for their proposed business. The team projects the needed capital and discusses their financial needs with a banker. The team selects a type of business organization and evaluates the variety of business records needed. Business policies for employees and customers are discussed, and each business group develops policies for their business. As students learn new concepts in the unit, they change or adapt their businesses.

The unit lesson plans are quite detailed because entrepreneurship is a new topic for most vocational home economics teachers. Learning activities in the unit incorporate role plays, guest speakers, and case studies in addition to reading assignments and class discussions. Guest speakers include small-business owners and bankers. Entrepreneurs of both sexes were encouraged to participate in class activities to emphasize that small-business ownership is a career possibility for either females or males.

### Career Exploration

The most difficult challenge in developing the lesson plans and learning activities was in determining the depth of content to include in each area. Experts in the field of small-business ownership believed it was important to introduce concepts in the areas that influence the success of a small business, but how much depth is necessary? Continually focusing on the overall objective of career exploration kept the content manageable.

### Unit Pilot Test

The unit, "Career Exploration of Entrepreneurial Home Economics Opportunities," has been pilot-tested in three schools in Iowa. The schools were located in Ames, Jefferson, and Marshalltown. Fifty-nine students, including 53 females and six males, participated. The evaluations of the pilot tests included quantitative data analysis by using an objective achievement test and an attitudinal device. Students in a vocational home economics class not involved in the pilot test were used as the control group for this analysis. Qualitative evaluations were done by using student and teacher reactions.

Results of the achievement test indicate that the ex-

perimental group did have greater achievement test scores, particularly in the area of understanding the availability of entrepreneurial opportunities. This is an especially important result because of the large number of females participating in the pilot test. The student reactions indicated that students are interested in pursuing entrepreneurship for reasons such as "want to be my own boss," see it as "a big challenge," "like people," and "would like to have people work for me." Students also have realistically analyzed that small-business ownership involves "handling the paperwork," "pressure," "responsibility," and "money to get started." One student said that this unit, "opens up the (career) possibilities for students." In each class, there are students who seriously intend to pursue careers as entrepreneurs.

#### Future Business Owners

Two students at Ames High School have decided to work towards the goal of becoming small-business owners. One student intends to open a bridal shop and has work experience in a bridal store and in cake decorating. She also intends to gain work experience with a florist as a background for her business venture. The other student knows that she wants to be an entrepreneur, but is undecided on a specific business.

### Students Identified Goals

Four students in Marshalltown are definitely interested in small-business ownership as a career, although they do not know what specific type of business they would like to own. These students were able to identify specific goals they need to achieve before being able to open their own small businesses. For some students these goals include furthering their education; for other students, it includes gaining work experiences. All students realized the importance of gaining some management experience before becoming a small-business owner.

Students in the home economics class at Jefferson High School in Jefferson, Iowa, studied the unit before opening their student-run restaurant in school. Students believe that "the restaurant really shows the community what students can do," and they intend to capitalize on that awareness. The class has considered the possibility of actually starting a new restaurant in their community. This idea grew out of the small-business ownership career exploration unit. Students have analyzed the community, evaluated financing alternatives, and have actually discussed this project with a local banker. The interest in small-business ownership created by this brief exposure to entrepreneurship indicates the timeliness of the topic for secondary students.

Three students in Ames have decided not to pursue careers



as entrepreneurs. Their main reason is that they do not want the responsibility associated with entrepreneurship. The teachers and business persons involved with this project believed it was just as important for students at this stage of a career choice to realize that entrepreneurship is not the career for them. Such knowledge will save time, energy, and financial commitments, which could result in a business failure.

#### Guest Speaker

Students were excited about their interactions with small-business owners during the unit. The owner of a needle-craft store in Ames related her beginning business mistakes and her successes to the home economics class. Students were amazed at the hours the owner and her husband had to put into the business in its first year of operation. They also were surprised at the number of different tasks performed by the owner each day. The image of a small-business owner sitting in an office, comfortably supervising employees, was shattered by this guest speaker.

#### Teachers Were Enthusiastic

The teachers involved in the pilot test were very enthusiastic. Teachers found the lessons, "detailed, workable, and on target for the level and interests of their students."

One stated, "Some students actually began to think of a small-business operation as a real possibility." They were pleased with the awareness gained by their students of the variety and number of small businesses in their community. Also, students with jobs were more understanding of their employers and managers in their work situations.

Teachers felt that the concepts taught in this unit are important, not only for future entrepreneurs, but also for future employees. An employee who is more knowledgeable about business can work better in a job situation. Thus, this unit fits well into any course in a vocational home economics program.

Another important aspect of the unit emphasized by teachers was the willingness of people from the community to share their experiences with students. This was illustrated by the bankers in Marshalltown and Jefferson who sent "thank you" notes to the teachers and students following their visits to the home economics classes. They had appreciated the opportunity to encourage students to pursue entrepreneurship as a career. The teachers were surprised with this reverse in sending thank you notes. The bankers commented that small-business ownership and the free-enterprise system are concepts fundamental to our economic system. They were excited about any program that encouraged students to think about becoming small-business owners.

Teachers were enthusiastic about exploring entrepreneurship in their home economics classes, but found that students had difficulty with some of the terms and some business concepts. For example, terms such as proprietorship, partnership, and corporation, and concepts such as financial management and the importance of small-business in today's economy were somewhat abstract for students. Because most small-business textbooks are very detailed and not appropriate for career exploration at the high school level, student reference sheets were developed. This was done in the unit revision after the pilot test upon the recommendation of the teachers. The reference sheets are an important feature of the unit to keep the content simple, manageable, and containing examples to which students can relate. The revised unit will be field-tested in Fall 1980 in 12 Iowa schools. It is anticipated the unit will be available in Summer 1981. For information regarding the unit, contact the second author.

## CONCLUSIONS

Results of the pilot test show that exploration of entrepreneurship as a career option is a viable topic for vocational home economics classes. As vocational educators, we need to consider exploration of entrepreneurship for our students. Entrepreneurship is a workable and appropriate content area for vocational education classes, and we have found student interest in this career choice. Could entrepreneurship be the career for some of your students?

SECTION III.

EXPERIMENTAL IMPLEMENTATION OF AN ENTREPRENEURIAL UNIT  
IN VOCATIONAL HOME ECONOMICS PROGRAMS

EXPERIMENTAL IMPLEMENTATION OF AN ENTREPRENEURIAL UNIT  
IN VOCATIONAL HOME ECONOMICS PROGRAMS

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## INTRODUCTION

A goal of many Americans has been the ownership of a small business. Today 98 percent of all businesses in the United States are considered small and those same small businesses employ 50 percent of the total work force (Baumbeck, Lawyer, & Kelley, 1973, p. 5; Steinhoff, 1978, p. 6). In 1980 a White House Conference on small business was held. The Conference was an indication of the current importance of small business in today's American economy. Also in 1980, the Small Business Development Act was signed (U.S. Congress, 1980, pp. 833-854). This act addressed the importance of preserving and promoting a free enterprise economic system through supporting small business growth and development.

Vocational education has recognized the importance of small business in the economy; however, vocational educators have had limited involvement in entrepreneurial preparation (Leach, 1977). With three or four potential entrepreneurs in every American classroom (Nelson & Bober, 1977), entrepreneurship is recognized as an important career area for vocational programs. The National Advisory Council on Vocational Education (NACVE) issued a report in 1979 stating "Education has neglected a responsibility to help people prepare for entrepreneurial employment" (p. 3). NACVE stated that the job creation potential of self-employment must be explored as a

new dimension in vocational education (National Advisory Council on Vocational Education, 1979).

Entrepreneurship is recognized as important by vocational educators. Entrepreneurial education in secondary vocational home economics education programs is limited. Entrepreneurship is included as a topic in occupational programs in secondary New York City schools (Greenwald & Perry, Note 4) and in Dallas, Texas (Kennedy, Note 5). Students do not achieve full experience as a small business owner in either of these programs, and career exploration is not included in either.

Given the few programs identified, it is apparent that entrepreneurship has not been included in traditional vocational home economics programs. Because entrepreneurship has been recognized as an important focus for vocational education, it is an important focus for vocational home economics educators to consider.



## OBJECTIVES

The major purpose of this study was to experimentally evaluate the implementation of an entrepreneurial unit in secondary vocational home economics programs. Specifically the objectives were to:

1. quantitatively analyze the implementation of the unit using student achievement test scores and attitudes towards small business as a career option,
2. quantitatively compare the implementation of the entrepreneurial unit in occupational and consumer and home-making classes,
3. qualitatively evaluate teacher reactions and student reactions to the implementation of the unit in vocational home economics classes.

## PROCEDURE

A nonequivalent-control group experimental design was used for the research study. This design was selected because it was not possible to randomly select classes to participate or to randomly assign classes to the experimental or control groups.

### Experimental Treatments

Two experimental treatments were identified for this study. The first experimental treatment was a three week career exploration unit on entrepreneurship. The unit was titled Career Exploration of Entrepreneurial Home Economics Opportunities (Fanslow & Compton, Note 9). The unit consisted of detailed teacher lesson plans, objectives, generalizations, student reference sheets, and student worksheets. The unit was detailed to ensure the experimental treatment being equivalent in the 12 schools participating in the study.

The overall student objectives for the unit were to:

- (1) explore small business ownership as a career option, and
- (2) identify factors influencing the success of a small business. Topics included in the unit were, nature of small business, goal-setting, product determination, advertising, business location, business expenses and capital, types of business organizations, financial management, business record

keeping, customer and employee relations, and characteristics of small business owners. Learning activities in the unit included case study analysis, a banker and small business owner guest speakers, readings, and group discussions. The class was divided into small groups at the start of the three-week unit. Each small group created a hypothetical business. The group changed their business as new concepts were presented in the unit treatment. The unit was pilot-tested in a preliminary study in 1980.

The second experimental treatment was type of vocational home economics class in which the experimental unit was implemented. The two class types used were (1) consumer and home-making and (2) occupational programs.

#### Instrumentation

Devices used in this study consisted of achievement and attitude pretests and posttests, as well as teacher and student evaluation instruments. Each of these devices was developed specifically for this study.

Achievement pretest and posttest were developed from a table of specifications and an achievement test pilot tested in 1980. The pretest consisted of 24 objective items and the posttest, 46 objective items. Both of these test the same content, though the items were different. The reliability of the posttest based on students in the experimental group

only, was .81 as computed by the Kuder Richardson 20 formula.

The attitude device was developed around the constructs: attitudes towards small business ownership, and attitudes towards small business owners. Ideas related to these attitudes were included in the entrepreneurial unit, as well as in the attitude device developed for the 1980 pilot test. Both the pretest and posttest consisted of the same 24 statements. Students responded on a 1 to 99 point scale.

An attempt was made to establish scales in the attitude device by subjecting the responses in the pretest, posttest control group, and posttest experimental group to factor analysis. The correlation matrix analyzed in each case was the pooled within group matrix. While factors did result in each group, they were not similar for each group. Therefore, the scales could not be analyzed across groups and the attitude data needed to be analyzed by item.

The teacher evaluation instrument included a series of questions regarding the implementation of the entrepreneurial unit in their home economics programs. Questions included, "Can the entrepreneurial unit be taught in consumer and home-making classes and/or in occupational home economics classes? Is the unit better taught in one subject area than another? What student feedback did you receive regarding the unit?"

The student evaluation instrument included items assessing the involvement of students and/or family members in a

family owned business. Also assessed were courses taken by students in which small business ownership was studied, student's sex, and student reactions to the implementation of the entrepreneurial unit in their home economics class.

### Sample

The sample included 12 secondary vocational home economics programs in Iowa. Six of these were consumer and homemaking programs, and six occupational programs. Programs were handpicked using a purposive sample (Selltitz, Wrightsman, & Cook, 1976, p. 521). This sampling procedure was used as it was necessary to have the cooperation of both the classroom teacher and the local school administration in each of the schools.

One home economics class was identified in each of the 12 programs as the experimental group. One home economics class, taught by the same teacher as the experimental group, was used as the control group. Similar classes taught by the same teacher were used as the control because variability within schools is known to be less than the variability between schools. Student enrollment in the classes ranged from seven to 21.

High school students were used as the subjects for the research study. Because of the use of human subjects, the project was reviewed and approved by the Iowa State University

Committee on Use of Human Subjects in Research.

Data Collection

Data were collected during the 1980-81 school year. The classroom teacher selected the specific consecutive three-week time period. The treatments were administered between September 1980 and January 1981. Follow-up conferences with teachers were conducted within two weeks of completing the experimental treatment. These conferences were conducted via personal phone calls with each of the teachers and project researchers.

Some classes took longer than the specified three-week period to complete the unit implementation. This variability in time was due to uncontrollable school interruptions and/or individual class projects. The school interruptions included athletic events, homecoming, and scheduled field trips. The class projects involved working in-depth on some of the entrepreneurial topics. Some classes actually created advertising campaigns and spent time in the community analyzing business locations and talking with small business owners. The class project decision was made by the classroom teacher and was not under the control of the researchers.

## DATA ANALYSIS

The experimental and control groups were compared on characteristics associated with family business ownership, courses studied involving small business ownership and sex of students. This frequency count and percent analysis comparison was done to examine the comparability of the students in the two groups.

The achievement test data were analyzed by class mean scores in an analysis of covariance (ANACOVA) design. The model for this analysis was:

$$P_{ijk} = \mu + G_i + S_{ij} + T_k + (GT)_{ik} + \beta X_{ijk} + \epsilon$$

Sources of variance were:

P = posttest

G = home economics program group, consumer and home-making or occupational

S = school

T = treatment, experimental or control

GT = interaction between program group and treatment

$\beta X$  = achievement pretest, covariate.

The number of weeks of class time used to implement the unit (D, duration) was not analyzed as a source of variance for this analysis. Using duration would have removed the effect of analyzing the pretest as a covariate, as all of the control groups would have had zero entries for time the unit

was studied. Hence, duration was analyzed individually with G and T in a separate analysis of variance (ANOVA). The model for this analysis was:

$$P_{ij} = \mu + G_i + T_k + D_l + \epsilon$$

where

P = posttest

G = home economics program group

T = treatment

D = duration.

The attitude device was analyzed by individual items in an ANACOVA design. Prior to analysis, the raw scores were transformed to normal deviates. Thus, a 1 was transformed to -233, a 50 to 0, and a 99 to +233. This transformation was done because respondents are more certain of responses at the extremes of the scale, and it weights the extremes of the scale accordingly (Wolins & Dickinson, 1973). The model for this analysis was:

$$P_{ij} = \mu + G_i + \beta X_{ij} + \epsilon$$

where

P = posttest

G = home economics program group

$\beta X$  = attitude pretest, covariate.



The teacher evaluation instruments were assessed by content analysis. Responses to each item were inspected. Recurring responses and some specific comments were noted. The student evaluation instruments were assessed by frequency counts, percent analysis, and content analysis.

## RESULTS AND DISCUSSION

Results of the field test experiment on the entrepreneurial unit are discussed in five parts. The five parts include student characteristics, achievement test, attitude device, teacher reactions, and student reactions.

### Student Characteristics

Background information on students in the experimental and control groups were compared to establish the similarity of the two groups. Courses in which students had exposure to small business ownership and/or selected topics discussed, were compared. Courses in which small business ownership was studied were accounting, business law, consumer economics, and general business. Percent of students involved in those courses ranged from three to 22 percent, but were by course, essentially the same from experimental to control group. Twenty-two percent of the experimental group and 21 percent of the control group said they had taken a general business course in which small business ownership had been studied.

The same courses were identified as those in which small business ownership topics were presented. The classes in which the most overlap of topics was found were in general business and accounting. Twenty-one percent of the experimental group said they had discussed some similar topics in each of these two classes. Fifteen percent of the control

group had studied similar topics in general business and 11 percent had studied the topics in accounting.

The comparison of students in the experimental group and control group showed that both groups had approximately the same number of family members owning businesses (Table 4). Twenty-nine percent of the experimental group and 26 percent of the control group had family members who were small business owners. Further, percentages of which family members owned those businesses were similar. The amount of contact the students had with a family-owned business was also similar between the experimental and control groups.

The two groups had approximately the same distribution of males and females in the classes. The majority of students in both the experimental and control group were women. Both groups had the same proportion of women and men, with the experimental group having 80 percent females and 20 percent males, and the control group having 79 percent females and 21 percent males.

Family background regarding small business ownership, associated coursework, and student sex were similar between the experimental and control groups. Thus, none of these confounding variables were considered as having impact on the experimental findings.

Table 4. Frequency counts on background data of students

Item	% yes response	
	Experimental Group N=217	Control Group N=212
Are any family members presently a small business owner?	29	26
Which family member:		
Mother	6	5
Father	13	12
Sister	2	0
Brother	5	3
Aunt or Uncle	12	12
Grandparent	1	4
Other	2	2
Amount of contact with the family- owned small business.		
Daily	7	6
2-3 times per week	4	5
Once a week	1	1
Less than once a week	17	14

## Achievement Test

Significant differences were found between the achievement test mean scores of the experimental group and the control group (Table 5), with the experimental group having higher mean scores (Table 6). Student gains on knowledge concepts of small business ownership were significantly greater following the implementation of the entrepreneurial unit.

Table 5. Achievement test ANACOVA

Source of variance	df	Mean Square	F ratio
Pretest	1	8.29	3.12
Type of home economics program (Consumer and homemaking vs. Occupational)	1	2.65	1.00
Error	9	2.65	
Pretest	1	45.87	11.87**
Treatment (Experimental vs. Control)	1	114.43	29.62***
Type of home economics program/ Treatment	1	6.34	1.64
Error	9	3.86	

\*\*p < .01.

\*\*\*  
p < .001.

Table 6. Achievement posttest mean score comparison by type of home economics program

	Experimental Group N=6	Control Group N=6
Consumer and homemaking program	27.9	22.1
Occupational home economics program	27.3	23.6

Type of home economics program, (1) consumer and homemaking, or (2) occupational, did not produce significantly different results on achievement test mean scores. This indicates that implementation of the unit is appropriate for students in either program type.

The analysis of duration of program by weeks is presented in Table 7. A significant F ratio ( $F = 9.76$ ; significant at the .05 level) was found. Analysis of the duration by mean scores of each class indicated that while the significant F ratio resulted from differences between classes, the increase in scores was not linearly related to length of time the unit was studied. Therefore it appears that the varying length of time the unit was studied had limited effects on the achievement experimental results.

Inspection of Table 7 indicates that the greatest dif-

Table 7. Comparison of unit implementation duration by achievement test mean scores

Duration by weeks	Number of programs:			Achievement test mean
	Consumer and Homemaking	Occupational	Total	
3	6	1	7	27.9
4	0	1	1	30.1
5	0	1	1	27.8
6	0	2	2	29.1
8	0	1	1	23.7

ference in achievement test mean scores was between one school with a four-week unit duration ( $\bar{X}=30.1$ ) and one school with an eight-week unit duration ( $\bar{X}=23.7$ ). Seven of the classes had a duration of three weeks and a mean score of 27.9. The program having a duration of eight weeks had many interruptions in the implementation of the unit. This fragmented experimental treatment may have contributed to the low mean score of the class on the achievement test.

### Attitude Device

Significant F ratios were found on 13 of the 24 attitude device items (Table 8). Sixteen of the possible 72 F ratios for main effects were found to be significant.

Mean score values on the main effects for the significant items were analyzed to determine what differences existed between main effect groups. The experimental treatment variable producing the most significant F ratios (7) was type of home economics program in which the unit was implemented. Students in the occupational home economics programs indicated that they felt "many opportunities exist for small business ownership, small business owners have many demands on their time, and small business owners have a rewarding career."

In the comparison of experimental group and control group, five significant F ratios were found. Inspection of the mean scores indicated the experimental classes more strongly agreed with statements such as "many opportunities exist for small business ownership, small business ownership is a possible career option for young people, and small business owners have fun doing their own thing." The experimental group also felt more strongly that women should consider a career as a small business owner.

The significant changes from pretest to posttest were produced on items, "small business owners are financially rich, small business owners have few worries, small business



Table 8. Significant F ratios for main effects on attitude device items

Item	Type	Treatment	Pre Post
Many opportunities exist for small business ownership.	7.11*	11.46**	
Small business owners are financially rich.			5.05*
Small business ownership is a possible career option for many young people.		14.36**	
Small business owners have fun "doing their own thing."		21.63***	
<sup>a</sup> -A profitable business "just happens;" no planning is required.	5.51*		
Women should consider a career as a small business owner.	5.35*	5.28*	
Small business owners have many demands on their time.	5.77*	6.37*	
-Short-term business goals are not related to long-term business goals.			17.20**
-Small business owners have few worries.			6.39*
Many things influence the success of a small business.	5.58*		
Increased sales of merchandise can be achieved through business advertising.	8.18*		
-Small business ownership is primarily for middle-aged persons.			20.18*
Small business owners have a rewarding career.	9.50*		

<sup>a</sup>A (-) indicates that low scores for the item are desirable.

\* p < .05.

\*\* p < .01

\*\*\* p < .001.

Table 9. Mean score values of significant F ratios on main effects from attitude device items

Item	Mean Scores					
	Type of program		Treatment		Pre Post	
	Consumer and Homemaking	Occupational	Experimental	Control	Pretest	Posttest
Many opportunities exist for small business ownership.	41.6	69.1	70.9	39.7		
Small business owners are financially rich.					-55.5	-45.6
Small business ownership is a possible career option for many young people.			67.9	33.4		
Small business owners have fun "doing their own thing."			63.1	31.6		
<sup>a</sup> A profitable business "just happens;" no planning is required.	-172.3	-187.5				
Women should consider a career as a small business owner.	21.5	47.1	47.1	21.6		

<sup>a</sup>A (-) indicates that low scores are desirable.

Table 9 (Continued)

Item	Mean Scores					
	Type of program		Treatment		Pre Post	
	Consumer and Homemaking	Occupational	Experimental	Control	Pretest	Posttest
Small business owners have many demands on their time.	88.7	112.5	116.1	85.2		
-Short-term business goals are not related to long-term business goals.					-66.3	-92.5
-Small business owners have few worries.					-155.9	-132.4
Many things influence the success of a small business.	130.9	152.6				
Increased sales of merchandise can be achieved through business advertising.	111.0	138.9				
-Small business ownership is primarily for middle-aged persons.					-108.0	-83.8
Small business owners have a rewarding career.	52.5	79.2				

ownership is primarily for middle-aged persons, and short-term business goals are not related to long-term business goals."

#### Teacher Reactions

Teachers indicated they enjoyed implementing the unit in their home economics classes, and many expressed surprise at how well the topic was accepted by their students. Vocational home economics teachers felt career exploration of entrepreneurship was appropriate for both consumer and home-making, and occupational home economics classes. Some overlap of financial management concepts with concepts in business education was found, but teachers indicated this overlap had potential for strengthening both programs. Interaction of persons from the community, bankers and small business owners, was a positive aspect of the unit. Teachers enjoyed expanding the "image" of home economics education in their local communities.

Teachers who implemented the unit in a family living course felt it was very appropriate, particularly in the area of family financial management. Teachers felt the unit was also easily adapted for foods, housing, and textile classes. Occupational home economics teachers indicated the unit was a good overview of business concepts, thus a sound base for introducing all areas of home economics occupations.

### Student Reactions

Student reactions from the implementation of the entrepreneurship unit in their home economics classes were very favorable. Students enjoyed "seeing the opportunities, planning their own business, and seeing that it was possible for someone young to actually consider starting a business." In particular students liked meeting with small business owners and visiting with local bankers in their classes. Some students indicated they "want to try having their own business." Others said they may not want to be a business owner, but now they are "more aware of my bosses stress." Small business ownership experts believe it is equally as important for students to decide to not become small business owners as to become small business owners. These career decisions may prevent the possible failure of some small business ventures.

Businesses which were hypothetically "created" by students in their small groups ranged from a cookie factory, an ice cream parlor, and a restaurant, to a dating service or day care service, a pet store or a hardware store. Specialty jean shops, sporting goods stores, and other clothing stores were also included.

## SUMMARY

The experimental unit implementation did produce significant results on achievement test score gains, with students receiving the experimental treatment having higher mean scores following the unit. The type of vocational home economics program in which the unit was implemented did not produce significant differences on achievement.

Some significant differences on attitude items were found, however, these represented only 23 percent of the potentially significant items. Thus, overall impact on student attitudes was not tremendous.

Student and teacher reactions to the unit implementation in their home economics classes were very favorable. Students enjoyed considering small business ownership as a possible career option and they enjoyed interacting with small business owners. Teachers enjoyed expanding the "image" of home economics and adding a new career dimension to their vocational programs.

Overall, the entrepreneurial unit was found to be appropriate for implementation in either consumer and homemaking or occupational home economics programs. Because of the favorable response to this topic in vocational home economics, it is recommended that other vocational areas consider implementation of entrepreneurial career exploration in their secondary programs.

## SUMMARY AND RECOMMENDATIONS

The purpose of this study was to experimentally evaluate the implementation of a unit exploring entrepreneurship as a career option in secondary vocational home economics programs. Because available entrepreneurship materials were not appropriate for this study, it was necessary to develop an instructional unit. As background information for developing the unit, it was necessary to study home economics related businesses and their owners to determine content areas and information about small businesses to include in the unit. The study was conducted in three phases which included (1) research on home economics related small businesses and their owners, (2) pilot test of the career exploration unit on entrepreneurship in three secondary vocational home economics classes, and (3) field test of the unit in 12 secondary vocational home economics classes.

Specific objectives for the research included answering the questions:

1. What are primary problems and concerns of small business owners in home economics related small businesses?
2. What are characteristics of home economics related small businesses?
3. Is small business ownership a viable career option for home economics students?

4. Is high school an appropriate level at which to introduce this career option for vocational home economics students?

5. What is the result of the experimental implementation of an entrepreneurial unit on students' achievement test scores and students' attitude scores towards small business?

6. Is the career exploration unit on entrepreneurship implemented more effectively in consumer and homemaking or in occupational home economics programs?

7. What are teacher and student reactions to the entrepreneurial unit in home economics classes?

#### Characteristics of Home Economics Related

##### Small Businesses

To determine characteristics of home economics related small businesses and their owners, in Iowa, a survey was conducted. A questionnaire was developed for the survey to assess business and owner characteristics.

The purposive sample was handpicked from Chamber of Commerce lists of small business owners. Ninety-five women and 84 men, 56 percent of the invited sample, completed the small business owner questionnaire in Spring 1979. Chi square values were computed from two-way contingency tables to test significant differences between male and female owners.

Significant differences were found in business character-



istics, background characteristics of owners, and business problems. Only 19 percent of the female business owners compared with 63 percent of the male business owners had gross receipts totaling \$125,000 or more. A greater proportion of women (68%) had an owner's draw of less than \$10,000, than did men (29%). Seventy-eight percent of the women started with less than \$25,000 of initial capital, while only 37 percent of the men started their businesses with that amount of initial capital.

Sixty-nine percent of the female business owners contributed 40 percent or less of the family income, while 51 percent of the male business owners provided the sole source of family income. Only 36 percent of the females had two or more years of managerial experience, while 68 percent of the males had that amount of managerial experience. Forty-seven percent of the men started their business before age 29, while only 20 percent of the women started their business before that age.

Overall, lower percentages of females than males indicated items that were business problems. "Reducing fixed costs" was the problem most often identified by both men and women, although men cited it significantly more often than did women. "Following government regulations, providing back-up personnel for employees, and selecting employees" were items also identified as business problems significantly more

often by men than by women. Women also identified these items as business problems, they simply did not identify these items, nor any business problem items, as often.

Personal comments from the female business owners indicated that small business ownership had "the rewards of a job well done, the pride of ownership, and the satisfaction of being your own boss." The comments indicated that female business owners were enthused about their career, yet needed guidance in small business ownership.

#### Implementation of Entrepreneurial Unit

The career exploration unit on entrepreneurship was developed for the pilot test based on a review of available materials and the study of small business owners. Topics identified for inclusion in the unit were: nature of small business, goal setting, product determination, advertising, business location, business expenses and capital, types of business organization, financial management, business record-keeping, customer and employee relations, and characteristics of small business owners.

The unit was pilot tested in three Iowa schools. Fifty-nine students, including 53 females and six males, participated. Students in a vocational home economics class not receiving the experimental unit treatment, in each of the three schools, were used as the control group for evaluation of an achieve-

ment test. The unit implementation was also evaluated using content analysis of student and teacher evaluation instruments.

Results on the achievement test indicated that the experimental group did have higher mean achievement test scores, particularly in the area of understanding the availability of entrepreneurial opportunities. Student reactions indicated that students were interested in pursuing entrepreneurship, for reasons such as "want to be my own boss," and "see it as a big challenge." Students also analyzed that small business ownership involves responsibility. Some students at each school decided to definitely pursue entrepreneurship as a career and some students definitely decided to not pursue entrepreneurship as a career.

Teachers involved in the pilot test were enthusiastic. The teachers believed concepts taught were important not only for potential small business owners, but also for future employees. Involvement and interaction in the community was another positive aspect of implementing the unit which the teachers identified.

Results of the pilot test indicated that entrepreneurship is a viable topic for vocational home economics classes. High school students were interested in the topic and able to study entrepreneurial concepts.

## Experimental Evaluation of Entrepreneurial Unit Implementation

A nonequivalent control group design was used to experimentally evaluate the implementation of the unit, Career Exploration of Entrepreneurial Home Economics Opportunities (Fanslow & Compton, Note 9) in secondary vocational home economics programs. Two types of vocational home economics were used: (1) consumer and homemaking, and (2) occupational programs.

Evaluation devices used in this study included achievement and attitude pretests and posttests, as well as teacher and student evaluation instruments. The achievement posttest consisted of 46 objective items and had a reliability of .81. The attitude posttest consisted of 24 statements. No reliability is reported because the device did not form comparable subscales when pretests and posttests were subjected to factor analysis.

The purposive sample included 12 secondary vocational home economics programs in Iowa. Six of these were consumer and homemaking programs and six were occupational programs. One home economics class in each of the 12 programs was identified as the experimental group, and one class, taught by the same teacher as the experimental class, was used as the control group.

Data were collected during the 1980-81 school year. The

unit implementation took longer than the specified three-week period in five classes. The duration of the unit implementation was not under the direct control of the researchers.

The student evaluation instruments provided information for comparison of the experimental and control groups on characteristics associated with family business ownership, courses studied involving small business ownership, and sex of students. This percent analysis comparison showed the experimental and control groups to be equivalent and thus these potentially confounding variables were not considered as having impact on the study results.

The achievement test data were analyzed by class mean scores in an analysis of covariance (ANACOVA) design. Significant differences were found between the mean scores of the experimental and control groups, with the experimental group having higher mean scores. Type of home economics program did not produce significantly different mean scores. The duration of the unit implementation was analyzed by achievement test mean scores in an analysis of variance. While schools differed significantly on achievement posttest scores, the differences were not linearly related to length of time the unit was studied.

The attitude device was analyzed by individual items in an ANACOVA design. Sixteen of the possible 72 F ratios for main effects were found to be significant. Mean score values

were analyzed to evaluate the significant differences. Students in the occupational home economics programs indicated they felt "many opportunities exist for small business owners, and small business owners have a rewarding career." The experimental classes also more strongly agreed with statements indicating that small business owners enjoy their work, and opportunities exist for young people as small business owners. The items found to have significant F ratios represented only 23 percent of those potentially significant items. Thus, overall impact on student attitudes was not tremendous.

The teacher evaluation instruments were assessed by content analysis. Teachers indicated they enjoyed implementing the unit in their home economics classes, and believed career exploration of entrepreneurship was appropriate in both consumer and homemaking and occupational classes.

Content analysis of student evaluation instruments indicated students enjoyed reviewing the opportunities in small business ownership. Some students intend to pursue careers as entrepreneurs. Other students indicated they understood their bosses better following the unit in which they evaluated small business from the owner's perspective.

The experimental unit was found to be appropriate for vocational home economics classes. Career exploration of entrepreneurship for secondary students was supported by

both students and teachers involved in the experimental implementation.

#### Recommendations for Future Research

This research study provides indications of areas for further research on small business and on entrepreneurial education. In the area of small business research the following recommendations are made.

1. In reviewing the research on female business owners, women working 40 hours per week and more were earning less money and contributing a smaller proportion of family income than their male counterparts. Future research should include information on how these women in fact operate their businesses, and in addition handle child care, housework, and other family responsibilities.

2. Some researchers have hypothesized that noneconomic contribution to a business is made by an entrepreneur's family. The role of the family in the entrepreneur's business has not been studied in-depth and warrants attention. The entrepreneur's family should be studied not only from the supporting role to the entrepreneur, but also from the role of contributing directly to the growth and development of the business.

3. Studies were identified which provide indications of the primary motivations for male entrepreneurs. Studies are

needed regarding the success and failure of female business owners. These studies should identify the particular areas of concern and problems, and particular motivations of women who consider and/or pursue this career. Both psychological assessments and observational components should be included in this research.

Entrepreneurial education has been shown to be a viable topic for secondary vocational home economics classes. In the area of future research on entrepreneurial education, the following recommendations are made.

1. The entrepreneurial unit used in the present research should be modified and experimentally tested in other vocational areas. This research would assess the degree to which career exploration of entrepreneurship is appropriate for secondary vocational programs in vocational areas.

2. Studies on in-depth entrepreneurial preparation are needed to determine when such in-depth preparation is appropriate. Experimental studies evaluating in-depth preparation programs at the high school and post high school levels are needed. These studies should be conducted at secondary, and two and four year post secondary institutions. Both traditional and nontraditional students should be included in the research studies.



## REFERENCE NOTES

1. Russell, John. AVA youth enterprise project - a success story. Paper presented at the American Vocational Association Convention, New Orleans, Louisiana, December 1980.
2. Fanslow, Alyce M., & Compton, Cheryl Wilson. Integration of entrepreneurship into on-going vocational programs. Paper presented at the American Vocational Association Convention, New Orleans, Louisiana, December 1980.
3. Kaplan, Carol B. Entrepreneurship in the 80's. Paper presented at the Marketing and Distributive Education Division, American Vocational Association Convention, New Orleans, Louisiana, December 1980.
4. Greenwald, Shirley, & Perry, Marie. Entrepreneurship awareness: The urban experience in New York City. Paper presented at the American Vocational Association Convention, Home Economics Division, New Orleans, Louisiana, December 1980.
5. Kennedy, Jerelene. Entrepreneurial access through vocational skill development. Paper presented at the American Vocational Education Research Association Meeting, Anaheim, California, December 1979.
6. Greenwood, Kathryn M. Individualized modules for apparel shop entrepreneurship. Paper presented at the American Vocational Education Research Association Meeting, Anaheim, California, December 1979.
7. Shapero, Albert. The role of entrepreneurship in economic development at the less-than-national level. Unpublished paper, Management Sciences Department, The Ohio State University, February 1979.
8. Scanlan, Thomas J. Entrepreneurship education: Education for more than self-employment. Paper presented at the American Vocational Association Convention, New Orleans, Louisiana, December 1980.
9. Fanslow, Alyce M., & Compton, Cheryl W. Career exploration of entrepreneurial home economics opportunities. Unpublished curriculum materials, Iowa State University, Ames, Iowa 1980.

## LITERATURE CITED

- Athena Corporation. Minding your own small business.  
Bethesda, MD: Athena Corporation, 1976. (ERIC ED  
134 826)
- Baumbeck, Clifford M., Lawyer, Kenneth, & Kelley, Pearce C.  
How to organize and operate a small business (5th ed.).  
Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.
- Bottoms, Gene. Why the U.S. needs more federal support of  
vocational education. VocEd, 1980, 55(5), 8-9.
- Broom, H. N., & Longenecker, Justin G. Small business  
management. Cincinnati: South-Western Publishing Co.,  
1975.
- Brown, Kay B. American enterprise series: The promotion  
function. Austin, Texas: The University of Texas, 1975.
- Collins, Orvis, & Moore, David G. The organization makers.  
New York: Meredith Corporation, 1970.
- Collins, Orvis F., Moore, David G., & Unwalla, Darab B.  
The enterprising man. East Lansing: Michigan State  
University Business Studies, 1964.
- Deeks, Joh. The small-firm owner-manager. New York: Praeger  
Publishers, 1976.
- Demarest, Janice Lyski. Women minding their own businesses:  
A pilot study of independent business and professional  
women and their enterprises. Unpublished doctoral dis-  
sertation, University of Colorado at Boulder, 1977.
- Eberhardt, Duane O. American enterprise series: Financial  
management. Austin, Texas: The University of Texas,  
1975.
- Flexman, Nancy Ann. Women of enterprise: A study of success  
and failure incidents from self-employed women using  
the perspectives of Bakan's constructs of agency and  
communion and attribution theory. Unpublished doctoral  
dissertation, University of Illinois, 1980.

- Gilmore, J. Barry. An investigation of selected entrepreneurial models' ability to predict successful entrepreneurial activity. Unpublished doctoral dissertation, University of Oklahoma, 1972.
- Hornaday, John A., & Aboud, John. Characteristics of successful entrepreneurs. Personnel Psychology, 1971, 24, 141-153.
- Hughes, Ruth P., Rougvie, Barbara, & Woods, Barbara. The national census study of secondary vocational consumer and homemaking programs. Ames, Iowa: Iowa State University Research Foundation, Inc., 1980.
- Koeninger, Jimmy G. American enterprise series: The marketing function. Austin, Texas: The University of Texas, 1975.
- Leach, James A. Teaching small business ownership and management. Illinois Career Education Journal, 1977, 33(4), 27-29.
- Lucas, Stephen R., & Miles, Benton E. American enterprise series: The selling function. Austin, Texas: The University of Texas, 1976.
- Luter, Robert R. American enterprise series: The management function. Austin, Texas: The University of Texas, 1975.
- McClelland, David Clarence. The achieving society. Princeton, New Jersey: Van Nostrand, 1961.
- National Advisory Council on Vocational Education. Preparation for self-employment. Washington, D.C.: U.S. Government Printing Office, 1979.
- National Business Education Association. Business ownership and management core curriculum. Washington, D.C.: U.S. Government Printing Office, 1972. (ERIC ED 147 558)
- Nelson, R. E. Owning and operating a small business. Springfield, Illinois: Illinois Office of Education, 1976.
- Nelson, Robert E., & Bober, Gerald F. Small business ownership: A neglected career option. Business Education World, 1977, 57(4), 22-23, 30.

- Persons, Edgar A. Helping small businesses make it. Arlington, Virginia: The American Vocational Association, Inc., 1978.
- Persons, E., & Swanson, G. Small business management going-into-business modules. St. Paul: University of Minnesota, 1978.
- Phillips, Ione. Preparing people to be their own bosses. VocEd, 1980, 55(5), 23.
- Russell, John S. Let's get bullish about small business. VocEd, 1980, 55(5), 24-27.
- Schwartz, Eleanor Brantley. Entrepreneurship: A new female frontier. Journal of Contemporary Business, 1976, 5, 47-76.
- Schrage, Harry. The R & D entrepreneur: Profile of success. Harvard Business Review, 1965, 62, 56-69.
- Selltiz, Claire, Wrightsman, Lawrence S., & Cook, Stuart W. Research methods in social relations (3rd ed.). New York: Holt, Rinehart, and Winston, 1976.
- Siropolis, Nicholas C. Small Business management: A guide to entrepreneurship. Burlington, MA: Houghton-Mifflin Co., 1977.
- Steinhoff, Dan. Small business management fundamentals. New York: McGraw-Hill Book Company, 1978.
- Strydesky, Rebecca Hawkins. American enterprise series: Merchandising and buying. Austin, Texas: The University of Texas, 1975.
- The bottomline: Unequal enterprise in America. Report of President's interagency task force on women business owners. Washington, D.C.: U.S. Government Printing Office, 1978.
- The Center for Vocational Education, The Ohio State University. A program for acquiring competence in entrepreneurship. Columbus: The Center for Vocational Education, The Ohio State University, 1980.
- U.S. Congress, 83rd. Small Business Act of 1953. Public Law 83-163. July 30, 1953.

- U.S. Congress, 94th. Education Amendments of 1976. Public Law 94-482. October 12, 1976.
- U.S. Congress, 96th. Small Business Development Act of 1980. Public Law 96-302. July 2, 1980.
- U.S. Department of Commerce, Bureau of the Census and Office of Minority Business Enterprise. Women-owned businesses, 1972. Washington, D.C.: U.S. Government Printing Office, 1976.
- U.S. Small Business Administration. Women and the U.S. Small Business Administration. Washington, D.C.: Author, 1978.
- Wainer, Herbert A., & Rubin, Irwin M. Motivation of research and development entrepreneurs. Journal of Applied Psychology, 1969, 53, 178-184.
- Wenrich, Ralph C., & Wenrich, J. William. Leadership in administration of vocational and technical education. Columbus, Ohio: Charles E. Merrill Publishing Company, 1974.
- Wolins, L., & Dickinson, T. L. Transformations to improve reliability and/or validity for affective scales. Educational and Psychological Measurement, 1973, 33, 711-713.

## ACKNOWLEDGMENTS

A doctoral program cannot be completed without the guidance and cooperation of many persons. This dissertation represents the completion of one person's doctoral program, and thus the contribution of many persons. I wish to acknowledge the following individuals for their contributions.

Dr. Alyce M. Fanslow for her many hours of guidance as my major professor and her support as the major advisor for this research project.

Dr. Anton J. Netusil for his continued encouragement in my professional pursuits, and particularly his guidance in my doctoral studies.

Drs. Jerelyn Schultz, Kenneth Stone, and David Williams for their time and cooperation as members of my program of study committee.

The Home Economics Division of the American Vocational Association for their financial and professional support.

The Iowa State University Agriculture and Home Economics Experiment Station for providing the funding for research project No. 2318, of which this doctoral study was a part.

Friends, in particular my fellow graduate students, whose hours of conversation and understanding made the past few years of study very memorable.

Dr. James W. Abbott, whose "teacher" role model, time

spent as major advisor for my master's degree, and personal challenges, provided much of the impetus for pursuing this goal.

My parents, Louis and Dolores Wilson, and my sisters, Susan and Barbara, for creating and sharing in a family in which education was valued, and my educational pursuits were encouraged.

My husband, Kenneth, without whose constant support and encouragement, the completion of this goal would not have been realized.

APPENDIX A.

SMALL BUSINESS OWNER QUESTIONNAIRE



## SMALL BUSINESS OWNER QUESTIONNAIRE

Alyce M. Fanslow and Cheryl W. Compton  
Home Economics Education  
Iowa State University

You as a small business owner realize the importance of starting this career with fundamental knowledge about business ownership. Your response is needed to help develop classroom activities for high school students. These activities will include summarized information from your responses, and the activities will be developed to help students more realistically understand small business ownership.

Directions: Choose the best response(s) to each statement that represents your business. Put the number of the response(s) in the blank to the right of each statement.

Answer all questions in terms of the business at the location to which the questionnaire was mailed.

## Part I. Business Characteristics

- A. Type of business ownership: A. \_\_\_\_
1. sole proprietor, (proceed to question C)
  2. partnership
  3. conventional corporation, you are a majority stockholder
  4. conventional corporation, you are a substantial, but not a majority stockholder
  5. subchapter S, ("tax option" corporation)
  6. other, please specify \_\_\_\_\_
- B. Other significant owners in the business (indicate all that apply): B. \_\_\_\_
1. spouse
  2. relative
  3. partner, other than relative
  4. a substantial stockholder
  5. other, please specify \_\_\_\_\_
- C. Ownership of building: C. \_\_\_\_
1. rent
  2. own
  3. business in home

D.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Fig. 10**

- Fig. 10**

F.

- F.

---

- 10

Other, please specify \_\_\_\_\_

- H. Amount of initial business capital from all sources: H. \_\_\_\_\_
1. \$ 9,999 or less
  2. \$ 10,000 - \$24,999
  3. \$ 25,000 - \$49,999
  4. \$ 50,000 - \$99,999
  5. \$100,000 or more
  6. none, proceed to question K
- I. Backing of loan: I. \_\_\_\_\_
1. Small Business Administration
  2. Farmer's Home Administration
  3. other, please specify \_\_\_\_\_
- J. Approximate percent of initial business capital from each of these sources. Use the following categories:
1. none
  2. 19% or less
  3. 20% - 39%
  4. 40% - 59%
  5. 60% - 79%
  6. 80% or more
- J. \_\_\_\_\_
- a. personal savings
  - b. spouse
  - c. parents or other relatives
  - d. friends
  - e. bank
  - f. other, please specify \_\_\_\_\_
- J. \_\_\_\_\_
- K. Sources of working capital (indicate all that apply): K. \_\_\_\_\_
1. bank
  2. retained business earnings
  3. other, please specify \_\_\_\_\_
- L. Gross receipts of business in 1978: L. \_\_\_\_\_
1. \$ 9,999 or less
  2. \$ 10,000 - \$ 24,999
  3. \$ 25,000 - \$ 49,999
  4. \$ 50,000 - \$ 74,999
  5. \$ 75,000 - \$ 99,999
  6. \$100,000 - \$124,999
  7. \$125,000 - \$149,999
  8. \$150,000 or more
- M. If now profitable, length of time after start-up before showing a profit: M. \_\_\_\_\_
1. one year or less
  2. 13 months - 2 years
  3. 25 months - 3 years
  4. more than 3 years
  5. not yet profitable (proceed to question P)

- N. If now profitable, your margin of profit: N. \_\_\_\_\_
1. 1% or less
  2. 2% to 4%
  3. 5% to 7%
  4. 8% to 10%
  5. 11% to 15%
  6. 16% or more
- O. If now profitable, the reasons you consider to be most important (indicate all that apply): O. \_\_\_\_\_
1. preparation and planning
  2. dedicated employees
  3. excellent product or services
  4. good management
  5. other, please specify \_\_\_\_\_
- (proceed to question Q)
- P. If not profitable, the reasons you consider to be most important (indicate all that apply): P. \_\_\_\_\_
1. lack of management experience
  2. inability to attract and retain productive employees
  3. inadequate planning and preparation
  4. inadequate working capital
  5. competition
  6. business in beginning phase of operation
  7. other, please specify \_\_\_\_\_
- Q. Owner's draw (salary) from your business before taxes in 1978 (per individual if in partnership or corporation): Q. \_\_\_\_\_
1. \$ 4,999 or less
  2. \$ 5,000 - \$ 9,999
  3. \$10,000 - \$14,999
  4. \$15,000 - \$19,999
  5. \$20,000 - \$24,999
  6. \$25,000 - \$29,999
  7. \$30,000 or more
- R. Square footage of business: R. \_\_\_\_\_
1. 499 sq. ft. or less
  2. 500-999 sq. ft.
  3. 1000-1499 sq. ft.
  4. 1500-1999 sq. ft.
  5. 2000 or more sq. ft.
- S. Information of importance when starting a new business (indicate all that apply): S. \_\_\_\_\_
1. methods of financing
  2. bookkeeping
  3. taxes
  4. government regulations
  5. insurance
  6. employee benefits
  7. marketing ideas
  8. advertising
  9. other, please specify \_\_\_\_\_

## T. Types of business problems

Indicate the degree to which you have each of the following business problems. Rate each problem using the following scale:

- |   |                         |
|---|-------------------------|
| 8 | - greatest problem      |
| 7 | - major problem         |
| 6 |                         |
| 5 |                         |
| 4 | - somewhat of a problem |
| 3 | - minor problem         |
| 2 |                         |
| 1 |                         |
| 0 | - no problem            |

## Accounting/Recordkeeping Problems

- |  |          |
|--|----------|
| 1. maintaining records                   | 1. _____ |
| 2. using financial records               | 2. _____ |
| 3. implementing inventory control system | 3. _____ |
| 4. using a spending plan                 | 4. _____ |

## Financing Problems

- |                                 |           |
|---------------------------------|-----------|
| 5. obtaining start-up capital   | 5. _____  |
| 6. obtaining working capital    | 6. _____  |
| 7. keeping down level of debt   | 7. _____  |
| 8. reducing fixed costs         | 8. _____  |
| 9. establishing credit policies | 9. _____  |
| 10. reducing fixed assets       | 10. _____ |

## Marketing Problems

- |                                    |           |
|------------------------------------|-----------|
| 11. determining products           | 11. _____ |
| 12. advertising products           | 12. _____ |
| 13. identifying target market      | 13. _____ |
| 14. establishing prices            | 14. _____ |
| 15. arranging business layout      | 15. _____ |
| 16. obtaining merchandise on time  | 16. _____ |
| 17. handling defective merchandise | 17. _____ |

## Personnel Problems

- |   |           |
|---|-----------|
| 18. establishing employee relationships     | 18. _____ |
| 19. establishing supplier relationships     | 19. _____ |
| 20. selecting employees                     | 20. _____ |
| 21. training employees                      | 21. _____ |
| 22. supervising employees                   | 22. _____ |
| 23. providing "back-up" personnel for owner | 23. _____ |
| 24. scheduling employee work-time           | 24. _____ |
| 25. controlling employee pilferage          | 25. _____ |

## Other

- |  |           |
|--|-----------|
| 26. protecting against shoplifting         | 26. _____ |
| 27. controlling acceptance of "bad" checks | 27. _____ |
| 28. obtaining management assistance        | 28. _____ |
| 29. obtaining technical assistance         | 29. _____ |
| 30. maintaining building and equipment     | 30. _____ |
| 31. following government regulations       | 31. _____ |
| 32. other, please specify                  | 32. _____ |

- |          |          |
|----------|----------|
| a. _____ | a. _____ |
| b. _____ | b. _____ |
| c. _____ | c. _____ |
| d. _____ | d. _____ |

## Part II. Demographic Data

(Provide information on person completing this questionnaire)

- A. Years worked in paid employment prior to present business ownership (include all part-time and full-time jobs but exclude managerial employment): A. \_\_\_\_
1. none
  2. 1 year or less
  3. 2-4 years
  4. 5-7 years
  5. 8-10 years
  6. 11 years or more
- B. Years worked in a managerial capacity prior to present business ownership: B. \_\_\_\_
1. none
  2. 1 year or less
  3. 2-4 years
  4. 5-7 years
  5. 8-10 years
  6. 11 years or more
- C. Years as a business owner (include present business in addition to previous business ownerships): C. \_\_\_\_
1. 1 year or less
  2. 2-3 years
  3. 4-6 years
  4. 7-10 years
  5. 11-15 years
  6. 16 years or more
- D. Number of businesses owned (count present business as one): D. \_\_\_\_
1. 1
  2. 2
  3. 3
  4. 4 or more
- E. Age when started present business: E. \_\_\_\_
1. 25 or under
  2. 26-29
  3. 30-34
  4. 35-39
  5. 40-49
  6. 50-59
  7. 60 or over
- F. Educational level (indicate all that apply): F. \_\_\_\_
1. less than high school
  2. high school diploma
  3. vocational or technical school
  4. some college preparation
  5. bachelor's degree (B.A. or B.S.)
  6. graduate degree (M.A., M.S., other)

- G. Contribution of business to your immediate household's money income (per individual if in partnership or corporation): G. \_\_\_\_\_
1. sole source of income
  2. major source of income (more than 60%)
  3. co-equal source of income (approximately 40-60%)
  4. contributing source of income (10-40%)
  5. minor or non-contributing source of income (less than 10%)
- H. Average number of hours worked per week in business: H. \_\_\_\_\_
1. 19 hours or less
  2. 20-39 hours
  3. 40-49 hours
  4. 50-59 hours
  5. 60 hours or more
- I. Personal role in starting business: I. \_\_\_\_\_
1. original founder(s)
  2. purchased the business
  3. purchased a partnership in an ongoing business
  4. inherited the business
  5. other, please specify \_\_\_\_\_
- J. Primary reason for becoming a business owner: J. \_\_\_\_\_
1. profit
  2. job satisfaction
  3. continuation of family-owned business
  4. encouragement by family and associates
  5. reward for personal efforts
  6. development of new ideas
  7. other, please specify \_\_\_\_\_
- K. Primary reason for selecting present business: K. \_\_\_\_\_
1. continuation of family-owned business
  2. encouragement by family and associates
  3. personal interest or skill
  4. profit and growth potential appeared above average
  5. recognition of a community need
  6. other, please specify \_\_\_\_\_
- L. Primary contribution to starting present business: L. \_\_\_\_\_
1. building and equipment
  2. ideas and expertise
  3. planning and organization
  4. start up and working capital
  5. other, please specify \_\_\_\_\_
- M. Length of time devoted to planning before starting your business: M. \_\_\_\_\_
1. none
  2. 1-6 months
  3. 7-12 months
  4. more than 1 year

- 8
- N. Type of business ownership preparation prior to present business ownership (indicate all that apply):
1. general business ownership courses, seminars
  2. self-study of general business principles
  3. technical preparation in area of business
  4. advice from experienced business owners
  5. on-the-job experience
  6. other, please specify \_\_\_\_\_
- O. Advice for someone considering business ownership (indicate all that apply):
1. analyze the competition
  2. conduct market survey
  3. evaluate the labor market
  4. insure adequate initial business capital
  5. other, please specify \_\_\_\_\_
- P. Your greatest personal satisfaction as a business owner:
1. building something for the future, particularly my family
  2. making a profit
  3. providing a needed product or service to the community
  4. being my own boss and making my own decisions
  5. providing employment for my employees
  6. being considered a leader in the community
  7. other, please specify \_\_\_\_\_
- Q. Provide any additional information about your business that you would like to share with high school students as they consider small business ownership as a career.

Please check that you have responded to all items.

Thank you for your responses. This information will help high school students as they consider the career of small business ownership.



APPENDIX B.

CORRESPONDENCE: SMALL BUSINESS OWNER RESEARCH

# IOWA STATE UNIVERSITY

Telephone 515-294-6444

February , 1979

A current research study in the Home Economics Education Department at Iowa State University is to help high school students explore the option of small business ownership as a career. In particular, a focus of the study is to look at small business ownership in fields related to home economics.

Your help is asked in identifying small business owners in selected fields related to home economics. Specifically the names of small business owners in the areas identified on the attached list are requested. Would you therefore send us a copy of your membership? Please check the list to see that the following are included: (1) business name, (2) business address, (3) owner's name and (4) type of business if not indicated in name of business. If any of these are not on the membership list, please write-in the information. Do not include business franchises. A small business is defined as one which is independently owned and not dominate in its field. The businesses could include retailers or manufacturers. They are probably operated out of one principle location, but may be out of several locations.

We will contact some of the owners identified by mail survey for information about their businesses such as type of business ownership, number of employees, and business problems. The information will be used in the high school career exploration project. Responses to the mailed survey will be confidential; the information collected will be summarized across types of businesses and will not be associated with a particular business.

May we also have permission to use your name when contacting business owners, to identify how we received their name? Please indicate your response on the attached form and enclose it with your membership list.

If you have any questions or would like to see the mailed survey please write or call Dr. Alyce M. Fanslow at 515-294-3991 or Mrs. Cheryl Compton, 515-294-4757. Please send your membership list in the enclosed, postage-paid envelope by February 23, 1979.

Sincerely,

Alyce M. Fanslow  
Associate Professor

Cheryl Compton  
Research Assistant

Types of Home Economics Related Businesses

Following are listed a variety of types of businesses which are home economics related. They are grouped into five areas to better identify the business areas in which we are interested. The specific business types given in each areas are not the only possibilities, but are included to serve as a guide for you when you select and send us names of small business owners in your community. Do not include franchise businesses.

**FOODS:**

- restaurant
- catering service
- grocery store
- bakery
- cake decorating business
- private foods consultant

**PERSONAL SERVICES:**

- housekeeping - maid service
- house sitting
- shopping service
- care persons for adults

**CHILD CARE:**

- day care center
- nursery school
- babysitting service

**HOME FURNISHINGS:**

- interior design
- home crafts
- kitchen boutique

**CLOTHING - TEXTILES:**

- fashion apparel shop
- men's clothing store
- clothing alteration
- garment construction
- used clothing shop
- towel, bath shop

PLEASE DETACH AND ENCLOSE IN RETURN ENVELOPE

---

You (may, may not) use my name when contacting business owners I've suggested.

---

(Signature)

IOWA STATE  
UNIVERSITY

Telephone 515-294-6444

March 14, 1979

Dear

A current research study in the Home Economics Education Department at Iowa State University is to help high school students explore the option of small business ownership as a career. In particular a focus of the study is to look at small business ownership in fields related to home economics.

You, as a small business owner, are asked to provide some information about your business by completing the enclosed questionnaire. The information provided will help students have a more realistic picture of business ownership as a career possibility. Your name was selected from a list of Chamber of Commerce members given to us by

Your response will be kept confidential. The information provided will be summarized across types of businesses and will not be associated with you or your business. Your name is on the return envelope only to verify who has responded. Response time averages 30 minutes.

If you have any questions please write or call Dr. Alyce Fanslow at 515/294-3991 or Mrs. Cheryl Compton at 515/294-4757. An addressed, postage-paid envelope is enclosed for your convenience. Please respond by March 30, 1979.

Sincerely,

*Alyce M. Fanslow*

Alyce M. Fanslow  
Associate Professor

*Cheryl Compton*

Cheryl Compton  
Research Assistant

AMF/CC/kf

Enc.

Have you mailed your questionnaire related to "Small Business Ownership"? Your response is needed in order to develop classroom activities which will help high school students more realistically understand small business ownership.

Because it is important your responses are included in the study, please complete the attached return postal card indicating when your completed questionnaire can be expected.

*Alyce M. Fanslow*

Alyce M. Fanslow  
Associate Professor

*Cheryl W. Compton*

Cheryl W. Compton  
Research Assistant

Home Economics Education Department  
Iowa State University  
Ames, IA 50011  
515-294-3991 or 515-294-4757

P-668



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United States

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Dr. Alyce M. Fanslow  
166C LeBaron Hall  
Iowa State University  
Ames, Iowa 50011

- \_\_\_\_\_ I have already mailed the questionnaire.
- \_\_\_\_\_ I will plan to complete the questionnaire within the next two days and mail it to you.
- \_\_\_\_\_ Something happened to my questionnaire. Please send another and I will complete it.

APPENDIX C.  
HUMAN SUBJECTS APPROVALS

## IOWA STATE UNIVERSITY

(Please follow the accompanying instructions for completing this form.  
119

1. Title of project (please type): Entrepreneur Opportunities in Home Economic  
Rural Areas

2. I agree to provide the proper surveillance of this project to insure that the health and welfare of the human subjects are properly protected. Additions to or changes in procedures affecting the subjects after the project has been approved will be submitted to the committee for review.

Alyce M. Fanslow

Typed Name of Principal Investigator

2/16/79

Date

Alyce M. Fanslow  
Signature of Principal Investigator166C LeBaron Hall

Campus Address

4-3991

Campus Telephone

3. Signatures of others (if any) \_\_\_\_\_ Date \_\_\_\_\_ Relationship to Principal Investigator \_\_\_\_\_

4. ATTACH an additional page(s) (A) describing your proposed research and (B) subjects to be used, (C) indicating any risks or discomforts to the subjects, (D) covering any topics checked below. CHECK all boxes applicable. SEE ATTACHED SUBJECT

- ☐ Medical clearance necessary before subjects can participate  
☐ Samples (blood, tissue, etc.) from subjects  
☐ Administration of substances (foods, drugs, etc.) to subjects  
☐ Physical exercise or conditioning for subjects  
☐ Deception of subjects  
☐ Subjects under 14 years of age and (or) ☐ Subjects 14-17 years of age  
☐ Subjects in institutions  
☐ Research must be approved by another institution or agency

5. ATTACH an example of the material to be used to obtain informed consent and the type which will be used.

- ☒ Signed informed consent will be obtained. Response to the questionnaire  
☐ Modified informed consent will be obtained. interpreted as informed consent

6. Anticipated date on which subjects will be first contacted: \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_  
 Anticipated date for last contact with subjects: \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_

7. If Applicable: Anticipated date on which audio or visual tapes will be made and identifiers will be removed from completed survey instruments: \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_

8. Signature of Head or Chairperson \_\_\_\_\_ Date 2/17/79 Department or Administrative Unit Home Economics

9. Decision of the University Committee on the Use of Human Subjects in Research

- ☒ Project Approved ☐ Project not approved ☐ No action required

George G. Karas

Name of Committee Chairperson

3/4/79

Date

George G. Karas

Signature of Committee Chairperson



## IOWA STATE UNIVERSITY

Follow the accompanying instructions for completing this form.)

119

at (please type): Entrepreneur Opportunities in Home Economics for

vide the proper surveillance of this project to insure that the rights  
the human subjects are properly protected. Additions to or changes  
affecting the subjects after the project has been approved will be  
the committee for review.

ow 2/16/79 Alyce M. Fanslow  
Principal Investigator Date Signature of Principal Investigator

all 4-3991  
mpus Address Campus Telephone

others (If any) Date Relationship to Principal Investigator

ditional page(s) (A) describing your proposed research and (B) the  
e used, (C) indicating any risks or discomforts to the subjects, and  
any topics checked below. CHECK all boxes applicable.

learance necessary before subjects can participate

SEE ATTACHED  
DESCRIPTION OF  
SUBJECTS

(blood, tissue, etc.) from subjects

ation of substances (foods, drugs, etc.) to subjects

exercise or conditioning for subjects

n of subjects

under 14 years of age and(or) ☐ Subjects 14-17 years of age

In Institutions

must be approved by another institution or agency

ample of the material to be used to obtain informed consent and CHECK  
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nformed consent will be obtained. Response to the questionnaire will be

Informed consent will be obtained. interpreted as informed consent.

date on which subjects will be first contacted: Month Day Year  
3 1 1979

date for last contact with subjects: 5 1 1979

le: Anticipated date on which audio or visual tapes will be erased and(or)  
will be removed from completed survey instruments:

Month Day Year

f Head or Chairperson Date Department or Administrative Unit

P. Hughes 2/27/79 Home Economics Education

the University Committee on the Use of Human Subjects in Research:

Approved ☐ Project not approved ☐ No action required

Karas 3/4/79 [Signature]  
mittee Chairperson Date Signature of Committee Chairperson

IOWA STATE UNIVERSITY

(Please follow the accompanying instructions for completing this form. 120)

1. Title of project (please type): Entrepreneur Opportunities in Home Economics  
Rural Areas

2. I agree to provide the proper surveillance of this project to insure that the health and welfare of the human subjects are properly protected. Additions to or changes in procedures affecting the subjects after the project has been approved will be submitted to the committee for review.

Alyce M. Fanslow 2/1/80 Alyce M. Fanslow  
Typed Named of Principal Investigator Date Signature of Principal Investigator  
211B MacKay Hall 4-3991  
Campus Address Campus Telephone

3. Signatures of others (if any) Date Relationship to Principal Investigator  
\_\_\_\_\_  
\_\_\_\_\_

4. ATTACH an additional page(s) (A) describing your proposed research and (B) subjects to be used, (C) indicating any risks or discomforts to the subject (D) covering any topics checked below. CHECK all boxes applicable.

- ☐ Medical clearance necessary before subjects can participate
- ☐ Samples (blood, tissue, etc.) from subjects
- ☐ Administration of substances (foods, drugs, etc.) to subjects
- ☐ Physical exercise or conditioning for subjects
- ☐ Deception of subjects
- ☐ Subjects under 14 years of age and/or ☒ Subjects 14-17 years of age
- ☐ Subjects in institutions
- ☐ Research must be approved by another institution or agency

5. ATTACH an example of the material to be used to obtain informed consent and which type will be used.

- ☒ Signed informed consent will be obtained.
- ☐ Modified informed consent will be obtained.

6. Anticipated date on which subjects will be first contacted: 2 11 8 Month Day Year  
Anticipated date for last contact with subjects: 12 31 8 Month Day Year

7. If Applicable: Anticipated date on which audio or visual tapes will be erased and identifiers will be removed from completed survey instruments: 12 31 8 Month Day Year

8. Signature of Head or Chairperson Date Department or Administrative Unit  
Peter D. Hughes 2/1/80 Home Economics Education

9. Decision of the University Committee on the Use of Human Subjects in Research  
☒ Project Approved ☐ Project not approved ☐ No action required  
George G. Karas 2/7/80 George G. Karas  
Name of Committee Chairperson Date Signature of Committee Chairperson

IOWA STATE UNIVERSITY

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follow the accompanying instructions for completing this form.)

Subject (please type): Entrepreneur Opportunities in Home Economics for Rural Areas

provide the proper surveillance of this project to insure that the rights of the human subjects are properly protected. Additions to or changes affecting the subjects after the project has been approved will be to the committee for review.

Fanslow 2/1/80 Alyce M. Fanslow  
of Principal Investigator Date Signature of Principal Investigator

Kay Hall 4-3991  
Campus Address Campus Telephone

of others (if any) Date Relationship to Principal Investigator

Additional page(s) (A) describing your proposed research and (B) the to be used, (C) indicating any risks or discomforts to the subjects, and any topics checked below. CHECK all boxes applicable.

clearance necessary before subjects can participate

(blood, tissue, etc.) from subjects

administration of substances (foods, drugs, etc.) to subjects

physical exercise or conditioning for subjects

involvement of subjects

Subjects under 14 years of age and (or) ☒ Subjects 14-17 years of age

Subjects in institutions

Research must be approved by another institution or agency

Example of the material to be used to obtain informed consent and CHECK what will be used.

Informed consent will be obtained.

and informed consent will be obtained.

Date on which subjects will be first contacted: 

Month	Day	Year
<u>2</u>	<u>11</u>	<u>80</u>

Date for last contact with subjects: 

<u>12</u>	<u>31</u>	<u>80</u>
-----------	-----------	-----------

Date: Anticipated date on which audio or visual tapes will be erased and (or) will be removed from completed survey instruments:

<u>12</u>	<u>31</u>	<u>80</u>
Month	Day	Year

Signature of Head or Chairperson Date Department or Administrative Unit  
P. Hughes 2/1/80 Home Economics Education

the University Committee on the Use of Human Subjects in Research:

Approved ☐ Project not approved ☐ No action required

Karas 2/7/80 Abbas  
Signature of Committee Chairperson

APPENDIX D.

CORRESPONDENCE: ENTREPRENEURIAL UNIT

# IOWA STATE UNIVERSITY

May 7, 1980

TO:

FROM: Alyce M. Fanslow  
Professor  
Home Economics Education

RE: Participation in Fall Field-Testing of the Small Business  
Exploratory Unit

Thank you for considering teaching the small business ownership career exploration unit in Fall, 1980. Information that would be useful to you in making that decision is provided in the following questions and answers.

## WHAT IS INVOLVED?

Teaching fifteen lessons during a three week block to tenth, eleventh and twelfth grade students. A pretest and posttest are included in the 15 lessons. (The tests include both achievement and attitude questions.)

Administering the same pretest and posttest to one other class so that a control group will (preferably) be taught by you.

## WHEN DOES THE UNIT NEED TO BE TAUGHT?

Between September 1, 1980 and November 27, 1980 (Thanksgiving Day).

## WHAT IS THE PURPOSE OF THE UNIT?

The main objective of the unit is for students to explore small business ownership as a career option. Other outcomes are a greater awareness by students of the community and an increased understanding of employers for whom they are working. Greater self-understanding of personal traits is also a result.

## WHAT CONTENT IS INCLUDED IN THE UNIT?

Topics include: goal-setting, target market, business location, advertising, capital, business organization types, and employee and customer relations.

## IN WHAT CLASSES CAN THE UNIT BE TAUGHT?

Any semester consumer and homemaking or occupational class. In the consumer and homemaking program consider child development, consumer education, foods, housing, or textiles and clothing.

HOW ARE LESSONS PRESENTED?

The lessons include teacher-directed activities, small group activities by students, guest speakers, and a slide-tape presentation. The lessons emphasize "hands-on" activities by students. A continuing activity in the unit is for small groups of students to make decisions for their own small business using the content studied.

A copy of the curriculum used in the pilot-test in Spring, 1980 is included. Revisions are being made for the fall field-test.

WHAT WERE THE REACTIONS OF STUDENTS IN THE PILOT-TEST?

Enthusiastic! Most had never thought about small business ownership as a career possibility. Students were interested in the businesses that were not available in the community.

WHAT WERE THE REACTIONS OF TEACHERS IN THE PILOT-TEST?

Enthusiastic! They found the lessons detailed, on-target, and workable. They also found a new interesting area to share with students.

WHAT TEACHER REFERENCES AND STUDENTS BOOKS ARE NEEDED?

Two teacher reference books and one student book. Reference materials and student books will be loaned by the Home Economics Education Department, Iowa State University. One student book will be provided for each student.

WHEN WILL I SEE THESE REFERENCES?

When you agree to participate, the first teacher reference and one copy of the student book will be mailed to you. In early July, 1980, the revised unit plan and the other reference will be mailed. Extra copies of student books will be mailed to you in the fall prior to your beginning the unit.

WHAT MEETINGS WILL I BE EXPECTED TO ATTEND?

Two meetings. The first will be an orientation meeting during the annual Vocational Home Economics Teachers' Conference. The meeting will be Wednesday evening, August 6, 1980. No conference meetings are scheduled at this time.

The second meeting will be either a follow-up meeting in Ames or a follow-up phone call after completion of the unit. Either one is agreeable to us and the decision will be based on your preference. (Travel costs will be paid to Ames but, unfortunately, costs of a substitute teacher cannot be paid. Therefore, I assume most of you will prefer the follow-up phone call.)

WHAT NEEDS TO BE RETURNED AFTER TEACHING THE UNIT?

1. Pretest and posttest answer sheets from both experimental and control groups (achievement and attitude tests combined)
2. Teacher reaction sheets for unit
3. Student and teacher reference books
4. Selected student assignments
5. Unit used in field test (After revision of the unit, a complementary copy will be mailed to you.)

CAN STUDENT GRADES BE DETERMINED FOR THE UNIT?

Yes! Student scores from the posttest can be used as well as scores on assignments in the unit. The extent to which student scores are used for grading is at the discretion of each teacher.

HOW WILL RESULTS FROM MY CLASS BE USED AT IOWA STATE?

Test results will be pooled with data from other participating schools for the purpose of analyzing whether scores are different between the experimental and control groups. Individual students scores and class scores will be kept confidential.

WHO IS SPONSORING THIS PROJECT?

The project is sponsored by the Iowa Agriculture and Home Economics Experiment Station. Mrs. Cheryl W. Compton is the research assistant associated with the project.

HOW CAN I ASK A QUESTION FOR ADDITIONAL INFORMATION?

Please call me at 515-294-3991 or Mrs. Compton at 515-294-3250. If neither of us answers, please call 515-294-6444 and leave a message for one of us to call you.

HOW CAN I VERIFY MY PARTICIPATION?

I will call you the week of May 12 to ask for your answer. If it is possible for you and your students to participate in the fall, necessary arrangements will then be made with your administration.

# IOWA STATE UNIVERSITY

May 21, 1980

TO:

FROM: Alyce M. Fanslow, Professor  
Home Economics Education

*Alyce M. Fanslow*

RE: Participation of in Field-test Project

A current project in the Home Economics Education Department is concerned with small business ownership and includes the development of a three-week unit for high school students. The unit is designed to give students an awareness of small business ownership as a possible career option, and covers various aspects of business ownership. During class sessions small groups of students create a business. The students make decisions related to that business as they learn new concepts in the unit.

The unit is to be field-tested in fall, 1980. We are asking to participate in the field-testing. The unit is to be tried with tenth, eleventh and twelfth grade students using one class selected by . Students in one other class will be asked to respond to a pretest and a posttest so that a control group can be obtained.

The unit involves a block of 15 days of class instruction. The lesson plans are developed in detail. All educational materials needed by teachers and students during the unit will be loaned by the Home Economics Education Department, Iowa State University.

Teachers participating in the field-test will participate in an orientation session on Wednesday evening, August 6 in Iowa City. This meeting occurs during the annual Home Economics Vocational Teachers' Conference.

After the unit is taught, teachers will be asked to provide reactions to the unit. This follow-up will occur either in Ames as a workshop or via a phone call. For most teachers, the follow-up will be via a phone call during after school hours. If teachers do come to Ames, transportation costs will be reimbursed.

Simultaneous letters explaining the field-testing and asking if one class of can participate have been sent to you and . A postal card indicating that your school is willing to participate has been sent to . If it is agreeable with you, would you please sign the card and have her mail it to us?



Page Two  
May 21, 1980

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The project is sponsored by the Iowa Agriculture and Home Economics Experiment Station. Mrs. Cheryl W. Compton is the research assistant associated with the project. If you have any questions about this project please call me at 515-294-3991 or Mrs. Compton at 515-294-3250. If neither of us answers, please call 515-294-6444 and leave a message for one of us to call you.

# IOWA STATE UNIVERSITY

Department of  
Home Economics Education  
219 MacKay Hall  
Ames, Iowa 50011  
Telephone 515-294-6444

Dear Parent or Guardian:

Your daughter/son will soon have the opportunity to explore small business ownership as a career option. The opportunity will occur in a home economics class which he/she is taking. During the class 15 class periods will be spent studying aspects of small business ownership. Included will be such topics as capital, business locations, types of business organizations, and financial management.

The reason we are asking students to participate in these lessons is to study if the lessons are understandable to students and to determine if small business ownership interests them as a career option. Students will be asked to complete an achievement test and a reaction sheet at the conclusion of the unit. Confidentiality of student responses will be assured by assigning code numbers to their responses and by destroying original responses after data have been recorded. The project is funded by the Iowa Agriculture and Home Economics Experiment Station.

While your daughter/son is under no obligation to participate, we urge you to grant permission because this is an opportunity for young people to explore a career option which few consider. Please sign and return the form which follows to the home economics teacher by Friday.

Sincerely,

Alyce M. Fanslow  
Professor  
Home Economics Education

-----  
\_\_\_\_\_  
(name of child) may participate in the study of small business  
ownership as a career option.

\_\_\_\_\_  
(signature of parent or guardian)

\_\_\_\_\_  
(date)

PLEASE RETURN BY FRIDAY

\_\_\_\_\_ Use of parental informed consent letters for the field test of the small business ownership career exploration unit will not be necessary.

\_\_\_\_\_  
Home Economics Teacher

\_\_\_\_\_  
School Administrator

IOWA STATE  
UNIVERSITY

Department of  
Home Economics Education  
219 MacKay Hall  
Ames, Iowa 50011  
Telephone 515-294-6444

July 22, 1980

TO: Karen Clover  
Melba Cox  
Linda Dowell  
Krista Feldman  
LaVon Gamman  
Claudia Harms  
Sharon Huseman  
Karen Jansen  
Joan McCready  
Pat Patty  
Doris Poindexter  
Betty Symons

FROM: Alyce Fanslow *AMF*  
Cheryl Compton *CYC*

The summer is flying by quickly and we hope yours has been enjoyable. As August approaches, everyone's thoughts are turning to the Vocational Home Economics Teacher's Conference, and to starting a new school year with all of its activities.

During the summer, final preparations have been made for the 1980 Fall field test of the career exploration unit. Enclosed is the revised unit which you will use this fall. The teacher reference book, Small Business Management: A Guide to Entrepreneurship is also being mailed to you today in a separate package.

Please review the unit thoroughly prior to the August 6 meeting in Iowa City. Details concerning the meeting and an agenda are listed below.

Field Test Workshop

August 6, 1980  
7-9:00 p. m.  
212 MacBride Hall  
University of Iowa  
Iowa City

1. Unit materials - Questions concerning the unit materials and implementation of lessons will be discussed. Because of time limitations, we do not plan to go through each lesson in detail, so please review the unit thoroughly prior to August 6 and come with questions. Bring the enclosed notebook with you to the meeting to facilitate discussion and to make any needed changes.

2. Research design - The research design and procedures used for the experimental field test will be briefly outlined.
3. Teacher reaction sheets - The green teacher reaction sheets found at the back of the unit will be reviewed.
4. Returning field test materials - A list of all materials to be returned to Iowa State University following the field test will be distributed and discussed. Procedures for returning materials will be outlined.
5. Informed Consent Forms - The Human Subjects Committee at Iowa State University asks that school administrators make the decision on whether or not informed consent forms signed by parents will be required in studies that involve students under 18 years of age. The options for a school are:
  - a. Approval by a school administrator saying that parental informed consent forms are not needed. This needs to be in writing and we will provide the form.
  - b. Decision by a school administrator that parental informed consent forms are needed. If these are needed, we will provide the forms. The teacher usually distributes and collects the forms for their students.

Please determine what option will be used in your school, so that you can tell us August 6. We will work out the details for implementing either option with you at that time. In the pilot test and in other research projects we have done, most schools use option a.

6. Pretest, posttest, and student text - Copies of the pretests, posttests, answer sheets, and student texts will be mailed directly to your school. A copy of the pretest will be distributed and reviewed at the workshop to illustrate the types of test items and format of the test. Please come with an idea of the number of students in your school who will be involved in the field test.
7. Follow-up conference after field test - Either a follow-up conference one day in Ames or follow-up phone calls will be held with teachers following the implementation of the field test. Please think about which follow-up you would like and come with a preference in mind. Travel costs to Ames for a conference will be paid, but we will not be able to pay for substitute teachers.
8. Date of field test - Please review your block plans and come with the dates in mind of when you intend to use the unit in your class(es). A schedule will be made of when the field test will be implemented at each school.

Thank you for all your time and cooperation and we look forward to seeing you soon. If you have any questions please call us.

Alyce Fanslow - Office - 515-294-3991  
Home - 515-292-2316

Cheryl Compton - Office - 515-294-3250  
Home - 515-232-0382

Home Economics Education - Office - 515-294-6444

# IOWA STATE UNIVERSITY

September 16, 1980

TO: Karen Clover  
Melba Cox  
Linda Dowell  
Krista Feldman  
LaVonne Gammon  
Claudia Harms

Sharon Huseman  
Karen Jansen  
Joan McCready  
Pat Patty  
Doris Poindexter  
Betty Symons

FROM: Alyce Fanslow *AF*  
Cheryl Compton *CC*

RE: Phone call conferences following field test

Following the completion of each field test, we will call each of you to individually establish a time for our conference phone call. We will plan the conference for within 7-10 days of completing the field test. Following the conference, you can return all field test materials to Iowa State.

Listed below are questions we would like to discuss during the conference phone calls.

1. What are some informal reactions/comments that you would like to share with us about the unit?
2. What would you change about the unit?
3. Is there a difference in the ability levels of the students in your experimental class as compared with students in your control group classes?
4. How does this unit fit in a home economics curriculum? What were student reactions about having this topic in home economics?

We look forward to talking with each of you soon. Please call us at any time if you have questions.

APPENDIX E.

FIELD TEST WORKSHOP AGENDA

133  
CAREER EXPLORATION OF ENTREPRENEURIAL  
HOME ECONOMICS OPPORTUNITIES

Field Test Workshop  
August 6, 1980  
212 MacBride Hall, University of Iowa

AGENDA

1. Unit materials: questions will be answered concerning the unit implementation
2. Research design:

Experimental classes

Pretest (Achievement test and attitude scale)	Experimental treatment (unit)	Posttest I (Achievement test and attitude scale)	Posttest II (pretest- achievement test repeated)
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Control group classes

Pretest (Achievement test and attitude scale)	No experimental treatment	Posttest I (Achievement test and attitude scale)
---	------------------------------	---

3. Teacher reaction sheets: discuss completing these forms (green sheets at back of notebook)
4. Returning materials to Iowa State University:
  - a. Materials to be returned include:
    1. "Career Exploration of Entrepreneurial Home Economics Opportunities" unit
    2. Teacher reaction sheets
    3. Pretest answer sheets
    4. Posttest answer sheets
    5. Attitude scale - all student responses
    6. Student answers to questions 1 and 2, Lesson 14, part III, bottom of page 85
    7. Particularly interesting student assignments (with student permission)
    8. Student texts
    9. Teacher reference books: The Women's Guide to Starting a Business and Small Business Management: A Guide to Entrepreneurship



## b. Procedure for returning materials:

1. Mail items 1-7 by U. S. Mail (first class).  
Postage will be reimbursed.
2. Mail items 8 and 9 by U. S. Mail (book rate) or by United Parcel Service.  
Costs will be reimbursed.
3. Mailing address for all materials:

Dr. Alyce Fanslow  
219 MacKay Hall  
Iowa State University  
Ames, IA 50011

5. Informed consent forms: identify the procedure used by each school and discuss needed forms
6. Pretest, posttest, and student texts: identify the number of students in each experimental and control groups class. Pass out sample tests and discuss.

## Notes regarding pretests and posttests:

- a. Achievement test answer sheets and attitude scale responses will be returned to ISU.
- b. The achievement test questions will not be returned to ISU. Teachers may keep the tests for class discussion and recording student achievement grades.
7. Date of implementation: identify the dates during which the unit will be implemented in each school
8. Follow-up conference: discuss and establish the follow-up conference procedure.
9. Teacher names, school addresses, school phone numbers, and conference time available during the school day: discuss the list provided for each teacher
10. Pictures taken during field test: discuss the possibility of having schools take 3-5 black and white glossy pictures during the unit implementation for possible future publication
11. Slide/tape presentation: discuss implementation

APPENDIX F.  
UNIT OVERVIEW

UNIT OVERVIEW**Unit Objectives:**

The student will be able to:

1. explore small business ownership as a career option.
2. identify factors influencing the success of a small business.

**Topical Lesson Outline:**

1. Nature of small business
  - define small business
  - identify home economics related small business
2. Goal-setting
  - identify short-term and long-term goals
  - recognize the role of goals in business success
3. Product determination
  - identify target market
  - analyze a community's ability to support small business
4. Advertising
  - analyze advertising mediums
  - select advertising for a small business
5. Business location
  - identify factors important in selecting a business location
6. Business expenses and capital
  - identify business expenses
  - recognize sources of business capital
7. Business capital
  - identify factors affecting a person's ability to obtain business capital

8. Banker visit

- identify criteria used by a banker to evaluate a loan applicant
- recognize the importance of a banker to a small business owner

9. Types of business organizations

- explain the basic legal forms of organization for a small business (proprietorship, partnership, corporation)

10. Financial management

- determine personal financial status
- define selected terms related to financial management

11. Business record keeping

- identify the kinds of business records necessary to a small business owner

12. Customer and employee relations

- recognize the importance of positive employee and customer relations to the success of a small business

13. Small business owner visit

- overview of small business owner responsibilities

14. Self-evaluation of small business ownership

- evaluate personal characteristics in relationship to characteristics of successful entrepreneurs

15. Achievement test

APPENDIX G.

SMALL BUSINESS OWNERSHIP PRETEST

SMALL BUSINESS OWNERSHIP PRETEST

**DIRECTIONS:** Write your name or student number on the test. Select the best answer to each question and circle the answer on the test.  
Each test question is worth one point.

1. Opportunities for a career in small business occur
  - A. frequently.
  - B. occasionally.
  - C. sporadically.
  - D. rarely.
2. Planning for a small business involves
  - A. establishing vacation schedules.
  - B. ordering inventory.
  - C. purchasing office furniture.
  - D. setting long-term goals.
3. If a small business owner plans to increase sales by 10% over the next year, the best short-term goal would be to
  - A. hire 2 new salespersons.
  - B. increase sales about 1% per month.
  - C. purchase 10% more inventory.
  - D. reduce employees vacations 1 day per month.
4. The target market for a record store would most likely include
  - A. middle age businessmen.
  - B. mothers of infant children.
  - C. working teenagers.
  - D. elderly widows.
5. An advantage of small business when compared with large business is that a small business can
  - A. be unique in the products offered.
  - B. meet the needs of a diverse target market.
  - C. operate successfully with a lower profit margin.
  - D. remain flexible through economic changes.
6. The place to advertise where probably the greatest number of people are reached within a community is
  - A. bill board.
  - B. newspaper.
  - C. television.
  - D. radio.

7. The best way for a business owner to determine whether an advertisement in one newspaper is reaching more people than those in another is for the business owner to
  - A. count coupons returned.
  - B. record employees' reactions.
  - C. tally customer comments.
  - D. monitor product sales.
8. What effect does location have on the success of a small business?
  - A. little effect
  - B. marginal effect
  - C. moderate effect
  - D. much effect
9. The small business owner's first step in selecting a business location is to
  - A. specify the expense allowed.
  - B. visit locations.
  - C. consult a banker on possible locations.
  - D. identify essential location needs.
10. A reason for leasing the building in which a business is located is to
  - A. assume maintenance costs.
  - B. increase owner's equity.
  - C. reduce initial expenses.
  - D. assure business location.
11. Operating costs in an established business include
  - A. advertising, equipment, building.
  - B. merchandise, land, license fees.
  - C. salaries, taxes, maintenance.
  - D. insurance, furniture, inventory.
12. Initial costs in starting a business include
  - A. advertising, taxes, interest.
  - B. building, equipment, inventory.
  - C. insurance, merchandise, heat.
  - D. rent, phone, wages.
13. An example representing collateral is
  - A. \$3000 debt.
  - B. \$3000 expenses.
  - C. \$3000 savings.
  - D. \$3000 insurance.
14. A source of capital is to
  - A. withdraw funds from personal account.
  - B. pledge support to community activity.
  - C. purchase merchandise for store.
  - D. take a lease on building.

15. Factors considered in evaluating a small-business loan applicant are
  - A. building value, financial obligations.
  - B. reserve fund, inventory value.
  - C. state tax, monthly rent.
  - D. insurance premium, loan payment.
16. Disadvantages of corporate ownership include
  - A. continuity, raising capital.
  - B. regulations, double taxation.
  - C. unlimited liability, divided authority.
  - D. start-up costs, management base.
17. An advantage of a corporation over a partnership is
  - A. simplicity of formation.
  - B. limitations on regulations.
  - C. continuity in ownership.
  - D. smaller start-up fees.
18. Business records are used by the small business owner to show
  - A. business worth.
  - B. community growth.
  - C. club memberships.
  - D. employee incentives.
19. Owner's equity is the owner's
  - A. accounts receivable.
  - B. current assets.
  - C. fixed liabilities.
  - D. net worth.
20. Payroll records help the owner determine wages due
  - A. banker.
  - B. employees.
  - C. owner.
  - D. supplier.
21. Current assets of a business are
  - A. \$2500 customer credit.
  - B. \$2500 delivery truck.
  - C. \$2500 cash register.
  - D. \$2500 rent payment.



22. Good employee-employer relations are developed by
- A. giving frequent criticism.
  - B. sharing business responsibility.
  - C. ignoring individual differences.
  - D. treating employees unfairly.
23. Providing services desired by customers is an example of
- A. developing community advertising.
  - B. positive employee attitudes.
  - C. building business credibility.
  - D. good customer relations.
24. A government sponsored agency for entrepreneurs is the
- A. Consumer Product Division.
  - B. Department of Labor.
  - C. Small Business Administration.
  - D. Federal Business Commission.

Now that you have completed the test, please record your answers on the separate answer sheet. Use a No. 2 pencil. On the answer sheet record your name or assigned student number and also mark your sex and grade.

APPENDIX H.  
SMALL BUSINESS OWNERSHIP POSTTEST

SMALL BUSINESS OWNERSHIP POSTTEST

DIRECTIONS: Write your name or student number on the test. Select the best answer to each question and circle the answer on the test. Each test question is worth one point.

1. The best definition for a small business is one which is
  - A. owner managed and funded by investment corporations.
  - B. controlled privately and has limited influence in its field.
  - C. diverse in the goods sold and serves the local community.
  - D. owned by one to three persons and controls the local market.
2. Opportunities for a career in small business occur
  - A. frequently.
  - B. occasionally.
  - C. sporadically.
  - D. rarely.
3. The target market for a record store would most likely include
  - A. middle-age businessmen.
  - B. mothers of infant children.
  - C. working teenagers.
  - D. elderly widows.
4. Sandra, a teenager wants to organize a babysitting service as a small business. Her first step before definitely selecting this business would be to
  - A. contract with friends to do the babysitting.
  - B. identify available transportation for babysitters.
  - C. establish the hourly babysitting fee.
  - D. determine if there is a need for this service.
5. Jeff wants to start a catering business to serve parties in clients homes. What factor must Jeff consider about the community before starting this business?
  - A. available shopping areas
  - B. number of restaurants
  - C. income level of people
  - D. variety of grocery stores
6. An advantage of small business when compared with large business is that a small business can
  - A. be unique in the products offered.
  - B. meet the needs of a diverse target market.
  - C. operate successfully with a lower profit margin.
  - D. remain flexible through economic changes.

7. The place to advertise where probably the greatest number of people are reached within a community is
  - A. billboard.
  - B. newspaper.
  - C. television.
  - D. radio.
8. The best way for a business owner to determine whether an advertisement in one newspaper is reaching more people than those in another is for the business owner to
  - A. count coupons returned.
  - B. record employees' reactions.
  - C. tally customer comments.
  - D. monitor product sales.
9. The first step in selecting an advertising medium is to
  - A. consider the frequency of contacts.
  - B. determine its appeal.
  - C. evaluate its cost.
  - D. identify the target market.
10. An advertising medium that is relatively inexpensive, permanent and reaches a wide audience is
  - A. billboard.
  - B. newspaper.
  - C. telephone yellow page.
  - D. radio.
11. The small business owner's first step in selecting a business location is to
  - A. specify the expense allowed.
  - B. visit locations.
  - C. consult a banker on possible locations.
  - D. identify essential location needs.
12. Two women are going to start an "after school day care center" for children of parents who work until 5 p. m. A primary factor in selecting the location in their community for the center would be
  - A. access to the homes of the owners.
  - B. attractiveness of the day care center's storefront.
  - C. availability of babysitters in the day care center's area.
  - D. distance from schools to the day care center.
13. In selecting a particular community for a new furniture store, a primary consideration would be
  - A. number of furniture stores in the area.
  - B. availability of good television and radio advertising.
  - C. personal preference for the community.
  - D. involvement of the Chamber of Commerce in promoting new business.

14. A reason for leasing the building in which a business is located is to
  - A. assume maintenance costs.
  - B. increase owner's equity.
  - C. reduce initial expenses.
  - D. assure business location.
15. Operating costs in an established business include
  - A. advertising, equipment, building.
  - B. merchandise, land, license fees.
  - C. salaries, taxes, maintenance.
  - D. insurance, furniture, inventory.
16. Initial costs in starting a business include
  - A. advertising, taxes, interest.
  - B. building, equipment, inventory.
  - C. insurance, merchandise, heat.
  - D. rent, phone, wages.
17. Capital in a contract purchase is obtained from
  - A. commercial bank.
  - B. credit union.
  - C. personal funds.
  - D. present owner.
18. Sources of business capital are
  - A. stock sales, bank loan.
  - B. building lease, business plan.
  - C. Small Business Administration, building purchase.
  - D. Department of Commerce, personal commitment.
19. Factors considered in evaluating a small business loan applicant are
  - A. building value, financial obligations.
  - B. reserve fund, inventory value.
  - C. state tax, monthly rent.
  - D. insurance premium, loan payment.
20. The least expensive type of business to start is a
  - A. service business.
  - B. retail business.
  - C. wholesale business.
  - D. manufacturing business.
21. Disadvantages of corporate ownership include
  - A. continuity, raising capital.
  - B. regulations, double taxation.
  - C. unlimited liability, divided authority.
  - D. start-up costs, management base.

22. An advantage of a corporation over a partnership is
- A. simplicity of formation.
  - B. limitations on regulations.
  - C. continuity in ownership.
  - D. smaller start-up fees.
23. A corporation is owned by its
- A. stock brokers.
  - B. loyal employees.
  - C. share holders.
  - D. legal advisors.
24. An advantage of a sole proprietorship is
- A. limited liability.
  - B. low start-up costs.
  - C. transferable ownership.
  - D. broader management base.
25. A current liability of a business would be
- A. \$400 electric bill.
  - B. \$50 phone rebate.
  - C. \$1000 customer credit.
  - D. \$3000 building mortgage.
26. Business records are used by the small business owner to show
- A. business worth.
  - B. community growth.
  - C. club memberships.
  - D. employee incentives.
27. An accounts receivable register helps the small business owner determine payments the
- A. accountant billed.
  - B. banker expects.
  - C. customers owe.
  - D. suppliers want.
28. Net worth on a balance sheet is determined by subtracting
- A. liabilities from assets.
  - B. assets from liabilities.
  - C. depreciation from assets.
  - D. losses from profit.
29. Total liabilities are determined on a balance sheet by adding
- A. current assets to current liabilities.
  - B. fixed assets to long-term liabilities.
  - C. fixed assets to current liabilities.
  - D. current liabilities to long-term liabilities.

30. A balance sheet helps the small business owner analyze trends in
- A. advertising costs.
  - B. employee wages.
  - C. equity growth.
  - D. merchandise sold.
31. Owner's equity is the owner's
- A. accounts receivable.
  - B. current assets.
  - C. fixed liabilities.
  - D. net worth.
32. A checkbook provides a record of
- A. petty cash receipts.
  - B. payments made.
  - C. coming payments.
  - D. planned expenditures.
33. Good employee-employer relations are developed by
- A. giving frequent criticism.
  - B. sharing business responsibility.
  - C. ignoring individual differences.
  - D. treating employees unfairly.
34. Good customer relations are not promoted by
- A. prompt service.
  - B. pleasant surroundings.
  - C. fair return policy.
  - D. gossiping clerks.
35. Positive business-community relations occur by
- A. assisting community events.
  - B. having attractive window displays.
  - C. promoting personal welfare.
  - D. allowing customer credit.
36. A plant store owner has a no guarantee-no return policy on all plants purchased in her store. This policy would most likely create
- A. positive community relations.
  - B. courteous employee attitudes.
  - C. poor customer relations.
  - D. negative advertising policies.
37. A characteristic common to most successful small business owners includes the ability to
- A. follow directions.
  - B. take reasonable risks.
  - C. be a procrastinator.
  - D. become a conformist.

38. A community resource important to an entrepreneur is a

- A. trade association.
- B. public library.
- C. professional magazine.
- D. supplier's catalog.

### Matching

Directions for answering appear with each set of questions.

#### Set I

In Column A are listed long-term goals toward which a business might work over a three-year period.

In Column B are listed short-term goals toward which a business might work over a three month period.

Select the short-term goal which will best help the business achieve the long-term goal.

Column A Long-term Goal	Answer	Column B Short-term Goal
39. Save \$3600 for remodeling of store. _____		A. Service as a committee chairperson in local business group.
40. Increase gross sales by 50%. _____		B. Attend a workshop related to administration.
41. Train an employee as store manager. _____		C. Expand sales by 3% to 6%.
42. Improve management ability. _____		D. Deposit \$300 in bank account.
		E. Teach an employee to summarize accounts receivable.



Set II

The four factors associated with one's ability to obtain credit (the 4 C's of credit) are listed in Column A. Definitions for the factors are given in Column B. Match the definitions with the factors.

Column A Factors		Column B Definitions
	Answer	
43. Capacity	_____	A. Circumstances external to the individual which influence the availability of money for loans
44. Character	_____	B. Reliance of an individual on his/her own powers
45. Collateral	_____	C. Pattern of behavior by an individual related to repayment of borrowed money
46. Conditions of economy	_____	D. Potential for loan repayment by individual based on relationship of income to debt
		E. Property, stocks, or bonds of an individual used as backing for a loan

Now that you have completed the test, please record your answers on the separate answer sheet. Use a No. 2 pencil. On the answer sheet write your name or student number and also mark your sex and grade.

APPENDIX I.

PERCEPTIONS ABOUT SMALL BUSINESS OWNERSHIP POSTTEST

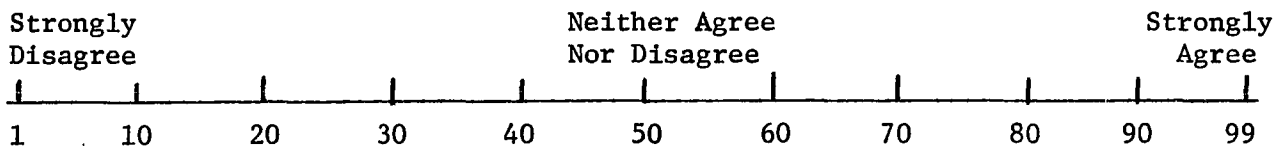
PERCEPTIONS ABOUT SMALL BUSINESS OWNERSHIP

POSTTEST

DIRECTIONS: You are asked to respond to each statement below in terms of your agreement with the idea expressed. Please respond to each of the statements using any number from 1 to 99. Use the following scale:

- Write 99 in the answer blank if you strongly agree.
- Write 1 in the answer blank if you strongly disagree.
- Write 50 in the blank if you neither agree nor disagree.
- Use a number from 51 to 98 if you agree to some degree.
- Use a number from 2 to 49 if you disagree to some degree.

The general scale is shown below:



Write your response in the answer blank.

- Planning for the next one to two years is important for a small business owner. 1. \_\_\_\_\_
- Many opportunities exist for small business ownership. 2. \_\_\_\_\_
- Small business owners are financially rich. 3. \_\_\_\_\_
- The business owner's knowledge about the merchandise influences business success. 4. \_\_\_\_\_
- Small business ownership is a possible career option for many young people. 5. \_\_\_\_\_
- Small business owners have fun "doing their own thing." 6. \_\_\_\_\_
- A profitable business "just happens;" no planning is required. 7. \_\_\_\_\_
- Women should consider a career as a small business owner. 8. \_\_\_\_\_
- Small business owners have many demands on their time. 9. \_\_\_\_\_
- Short-term business goals are not related to long-term business goals. 10. \_\_\_\_\_
- Few individuals have "what it takes" to be a small business owner. 11. \_\_\_\_\_
- Small business owners have few worries. 12. \_\_\_\_\_
- Accurate record keeping is not necessary in a small business. 13. \_\_\_\_\_

- Small business ownership opportunities are "few and far between." 14. \_\_\_\_\_
- Small business owners can be gone from the store at any time they wish. 15. \_\_\_\_\_
- Many things influence the success of a small business. 16. \_\_\_\_\_
- Small business ownership opportunities exist in every community. 17. \_\_\_\_\_
- Small business owners have an opportunity to make many contributions to the community. 18. \_\_\_\_\_
- Increased sales of merchandise can be achieved through business advertising. 19. \_\_\_\_\_
- Small business ownership is primarily for middle-aged persons. 20. \_\_\_\_\_
- Small business owners have the chance to "leave something to their families." 21. \_\_\_\_\_
- Business capital is available to those with suitable qualifications. 22. \_\_\_\_\_
- Growth opportunities are present with small business ownership. 23. \_\_\_\_\_
- Small business owners have a rewarding career. 24. \_\_\_\_\_

#### SPECIFIC REACTIONS TO SMALL BUSINESS OWNERSHIP UNIT:

- The reading assignments in the small business unit were difficult for me to read. 25. \_\_\_\_\_
- I found the classroom activities related to small business were interesting. 26. \_\_\_\_\_
- I'm glad I had a chance to explore small business ownership as a career option. 27. \_\_\_\_\_
- Information I learned in the small business unit will be useful to me in the future even if I don't become a small business owner. 28. \_\_\_\_\_
- I wish students had been given more of an opportunity to participate in the small business unit. 29. \_\_\_\_\_
- After studying about small business I know how to approach becoming a small business owner if I should decide to try it. 30. \_\_\_\_\_
- Because we studied about small business ownership I am (will be) more aware of my responsibilities in a small business. 31. \_\_\_\_\_
- The small business unit made me more aware of small businesses in my community. 32. \_\_\_\_\_

33. What did you like the best about the unit?

34. What did you like the least about the unit?

35. Any other comments are welcome, please write below.

Please provide the following information about yourself.

36. Have you studied about small business ownership as a career option in any other courses you have taken?

\_\_\_\_\_ Yes

\_\_\_\_\_ No, proceed to question 37.

If yes, please indicate by an (x) in which course.

\_\_\_\_\_ Accounting

\_\_\_\_\_ Business Law

\_\_\_\_\_ Business organization  
and management

\_\_\_\_\_ Consumer Economics

\_\_\_\_\_ General Business

\_\_\_\_\_ Other, please specify \_\_\_\_\_

37. Have you studied some of the topics in the small business ownership unit in other courses which you have taken?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If yes, please indicate by an (x) in which courses. Also, indicate the topic covered.

Topic

\_\_\_\_\_ Business Law

\_\_\_\_\_ Consumer Economics

\_\_\_\_\_ Accounting

\_\_\_\_\_ Business Organization  
and Management

\_\_\_\_\_ Economics

\_\_\_\_\_ General Business

\_\_\_\_\_ Other, please specify course and topic \_\_\_\_\_

APPENDIX J.  
TEACHER REACTION SHEET

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Teacher Reaction Sheet

Career Exploration of Entrepreneurial Home  
Economics Opportunities

Name \_\_\_\_\_

School \_\_\_\_\_

Experimental Group:

Title of course in which the unit was taught: 1. \_\_\_\_\_

2. \_\_\_\_\_

Grade level (s) of student enrolled: 1. \_\_\_\_\_

2. \_\_\_\_\_

Student enrollment in course by sex:

Men 1. \_\_\_\_\_

Women 1. \_\_\_\_\_

2. \_\_\_\_\_

2. \_\_\_\_\_

Length of class period \_\_\_\_\_

Control Group:

Title of course: 1. \_\_\_\_\_

2. \_\_\_\_\_

Grade level of students enrolled: 1. \_\_\_\_\_

2. \_\_\_\_\_

Student enrollment in course by sex:

Men 1. \_\_\_\_\_

Women 1. \_\_\_\_\_

2. \_\_\_\_\_

2. \_\_\_\_\_

## DIRECTIONS

We would like your reactions to the unit. To facilitate your reactions, a brief evaluation sheet has been prepared. After you teach the unit, please evaluate it. React to each comment listed using the appropriate number from the following continuum in the blanks:

1	2	3	4	5
Disagree				Agree
1. The generalizations support the objectives.				1. _____
2. Learning activities lead students to conclude the generalizations.				2. _____
3. Learning activities were of interest to students.				3. _____
4. Lessons could be taught in the time available for the class period.				4. _____
5. Sufficient detail was provided in the lesson plans for easy teacher implementation.				5. _____
6. Students worked well in the small groups throughout the unit.				6. _____
7. Lessons were at a level appropriate to the students.				7. _____
8. Students were able to learn the vocabulary terms in the unit.				8. _____
9. Lesson content was of interest to students.				9. _____
10. Guidesheets were useful in structuring comments by the guest speakers.				10. _____
11. It was not difficult to arrange for guest speakers.				11. _____
12. Make-up assignments were appropriate and useful.				12. _____
13. Reading assignments were appropriate for students.				13. _____
14. Assignments/tests included were sufficient to "accurately" assess student performance.				14. _____
15. Student reference sheets were useful to students.				15. _____

Please respond to each of the questions on the following page.



1. What lessons seemed most important?
2. What lessons seemed least important (or which lessons could be deleted)?
3. Is there a different order in which you would sequence lessons?  
If so, what?
4. Were any lessons or parts of lessons not used?  
If so, indicate which ones and the reason(s).
5. Is there a different approach to any lesson in the unit you would suggest?  
If so, what?
6. Does the slide/tape presentation add to the lessons? Could it be deleted?
7. Can the entrepreneurial unit be taught in consumer and homemaking classes?  
occupational home economics classes?
8. Is the unit better taught in one subject area than another?
9. What feedback did you receive from students concerning the unit?

Any other comments.

APPENDIX K.

FOLLOW-UP CONFERENCE WITH FIELD TEST TEACHERS

Project: Career Exploration of Entrepreneurial Home Economics Opportunities

Field Test: Follow-up conference with teachers

Date and time: \_\_\_\_\_

Phone call or personal conference: \_\_\_\_\_

Field test site: \_\_\_\_\_

Interviewer(s): \_\_\_\_\_

Questions

1. What are some informal reactions/comments you would like to share about the unit?

2. What would you change about the unit?

3. Is there a difference in ability levels of the control group and experimental group classes?

4. How does this fit into the home economics curriculum? What are student reactions to having this topic in home economics?

5. Other comments:

APPENDIX L.

ATTITUDE DEVICE F RATIOS BY ITEM

Table L-1. Attitude device F ratios by item

Item	Type	Treatment	Type / Treatment	Pre Post	Type / Pre Post	Treatment / Pre Post	Type / Treatment / Pre Post
Planning for the next one to two years is important for a small business owner.	.02	2.14	4.7	.39	.06	.04	1.43
Many opportunities exist for small business ownership.	7.11*	11.46**	4.44	2.91	.09	3.91	.21
Small business owners are financially rich.	.33	3.33	4.71	5.05*	.18	1.03	.26
The business owner's knowledge about the merchandise influences business success.	3.89	.69	.84	.41	1.64	4.75	7.43*
Small business ownership is a possible career option for many young people.	2.17	14.36**	.21	1.13	.48	2.55	1.22
Small business owners have fun "doing their own thing."	1.51	21.63***	.10	.70	.14	.30	.10

\* p < .05.

\*\* p < .01.

\*\*\* p < .001.

Table L-1 (Continued)

Item	Type	Treatment	Type/ Treatment	Pre Post	Type/ Pre Post	Treatment/ Pre Post	Type/ Treatment/ Pre Post
<sup>a</sup> A profitable business "just happens;" no planning is required.	5.51*	3.10	1.90	2.00	.01	2.20	2.65
Women should consider a career as a small business owner.	5.35*	5.28*	.69	.98	.93	.11	4.16
Small business owners have many demands on their time.	5.77*	6.37*	.03	.51	.00	4.93*	.02
-Short-term business goals are not related to long-term business goals.	.06	2.75	1.39	17.20**	3.67	2.78	.64
-Few individuals have "what it takes" to be a small business owner.	.00	.08	.01	.28	1.87	.51	1.08
-Small business owners have few worries.	4.18	1.62	.59	6.39*	.02	1.29	1.13
-Accurate record keeping is not necessary in a small business.	4.58	1.49	.18	.17	1.08	2.59	.00
-Small business ownership opportunities are "few and far between."	3.15	2.87	1.10	.66	.02	1.23	.34

<sup>a</sup>A (-) indicates that low scores for the item are desirable.

Table L-1 (Continued)

Item	Type	Treatment	Type/ Treatment	Pre Post	Type/ Pre Post	Treatment/ Pre Post	Type/ Treatment/ Pre Post
-Small business owners can be gone from the store at any time they wish.	.04	.03	.16	4.67	1.23	5.37*	7.47*
Many things influence the success of a small business.	5.58*	.83	.03	4.59	.06	6.14*	.10
Small business ownership opportunities exist in every community.	3.09	2.40	.96	.57	.41	10.35**	.00
Small business owners have an opportunity to make many contributions to the community.	4.58	3.61	.72	1.61	.52	4.64	.08
Increased sales of merchandise can be achieved through business advertising.	8.18*	2.61	.08	2.44	.02	.06	.01
-Small business ownership is primarily for middle-aged persons.	.04	2.73	.26	20.18**	5.76*	.66	3.09
Small business owners have the chance to "leave something to their families."	.53	1.14	.15	.12	.18	1.23	1.20
Business capital is available to those with suitable qualifications.	3.38	2.23	2.90	1.74	.09	1.05	.21

Table L-1 (Continued)

Item	Type	Treatment	Type/ Treatment	Pre Post	Type/ Pre Post	Treatment/ Pre Post	Type/ Treatment/ Pre Post
Growth opportunities are present with small business ownership.	4.67	3.25	.02	.56	.00	3.17	.29
Small business owners have a rewarding career.	9.50*	2.12	.08	.47	.00	3.64	.45



APPENDIX M.  
FREQUENCY COUNTS REGARDING STUDENT COURSEWORK  
INVOLVING BUSINESS CONCEPTS

Table M-1. Frequency counts regarding student coursework involving business concepts

Item	% yes response	
	Experimental Group N=217	Control Group N=212
Courses taken in which small business ownership was studied:		
Accounting	17	13
Business law	6	3
Consumer economics	13	8
General business	22	21
Courses taken in which similar topics were presented, as were presented in the entrepreneurial unit.		
Accounting	21	11
Business law	6	2
Consumer economics	11	5
Economics	3	3
General business	21	15